



Childhood Injury *in* Virginia



A Report on
Injury-Related Deaths
and Hospitalizations
Among Children and
Adolescents in Virginia
Ages 0 - 19

1994 - 1997

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Among Children and Adolescents in Virginia Ages 0 - 19
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Executive Summary

The Center for Injury and Violence Prevention, Virginia Department of Health is proud to present a report on injury in Virginia. This report illustrates the impact that injuries are having on the Commonwealth. The report examines fatal and nonfatal injuries that occurred among children and adolescents under the age of twenty from 1994 to 1997 and highlights steps that can be taken to keep them safe in the future. Injuries are not accidents. They are understandable, predictable and preventable. By examining injury patterns, we can identify groups at

increased risk and potential modifiable factors that affect the occurrence of injury. As injuries continue to impact society as a whole, injury prevention becomes the responsibility of the community and communities must take steps to prevent injury. Effective injury prevention campaigns begin with data. National, state and local data can be used to more effectively allocate resources for the planning and implementation of injury prevention programs.

From 1994 to 1997 in Virginia:

- On an average day, more than one child/adolescent died as a result of an injury and more than 14 were hospitalized.
 - Injury was the leading cause of death among Virginians ages 1 to 19 and accounted for 61% of all deaths.
 - 65% of all injury deaths among children and adolescents under the age of 20 were unintentional, 20% were homicides, 13% were suicides and 2% were of unknown intent.
 - The leading causes of injury deaths among children and adolescents under the age of 20 were motor vehicles (39%), firearms (26%), suffocations (7%), drowning/submersions (7%) and fire/burns (6%).
 - Virginia Hospitals reported more than 5,300 hospitalizations per year among children and adolescents under the age of 20.
 - 77% of all injury hospitalizations among children and adolescents under the age of 20 were unintentional, 15% were self-inflicted, 6% were assaults and 2% were of unknown intent.
 - Injury hospitalizations resulted in charges of more than \$37 million per year with an average charge of more than \$7,100 per injury hospitalization.
 - The leading causes of injury hospitalizations among children and adolescents under the age of 20 were poisoning (23%), motor vehicles (22%), falls (20%), striking injuries (7%) and cuts and pierces (4%).
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Virginia Department of Health,
Center for Injury and Violence Prevention

I.

Overview and Summary

A. Introduction

Injuries are a leading cause of death among children and adolescents in Virginia and pose a major threat to their future and well-being. In 1997 alone, injuries accounted for 31 percent of all deaths among children and adolescents under the age of 20. As Figure 1 reveals, when infants ages 0 to 12 months are excluded, the proportion of deaths due to injury increases dramatically to 61 percent. Figure 2 reveals the proportion of all deaths attributable to injury by age.

Figure 1: Causes of Death, Ages 1 - 19, Virginia, 1997

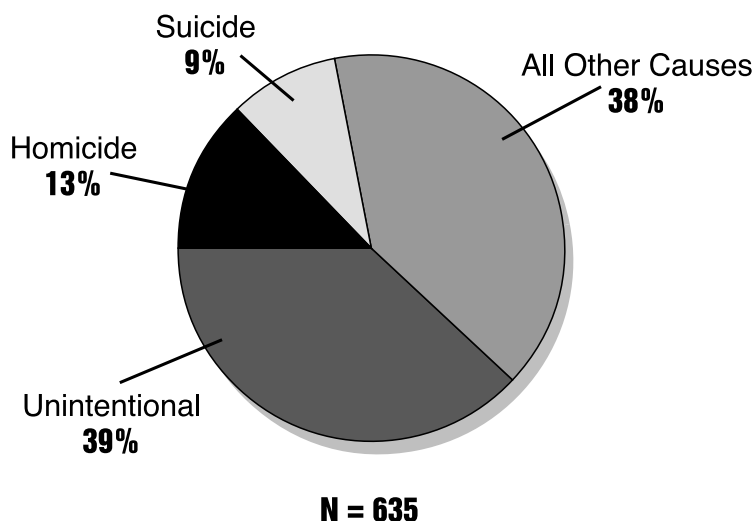
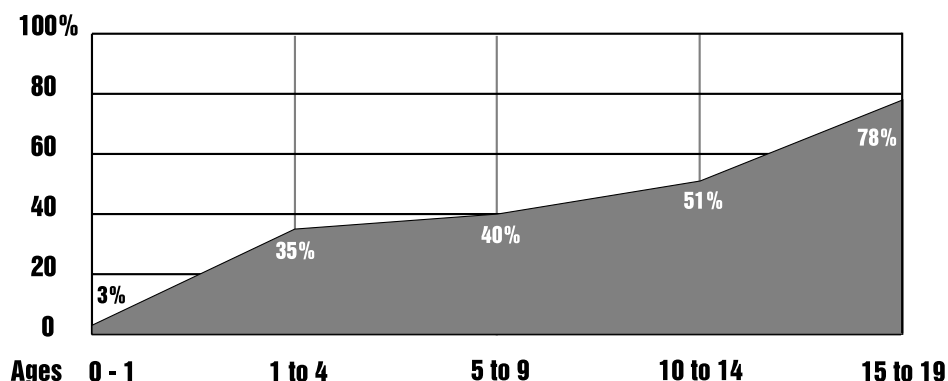


Figure 2: Injury as a Proportion of All Causes of Death by Age, 1997



More children between 1 and 19 years of age die from injury than from all other causes combined. Everyday more than 14 Virginians under the age of twenty are hospitalized as a result of injury at a cost of more than \$36 million dollars per year and an average charge of \$7,100 per injury hospitalization.

The information in this report profoundly illustrates the extensive impact of injury to children and adolescents in

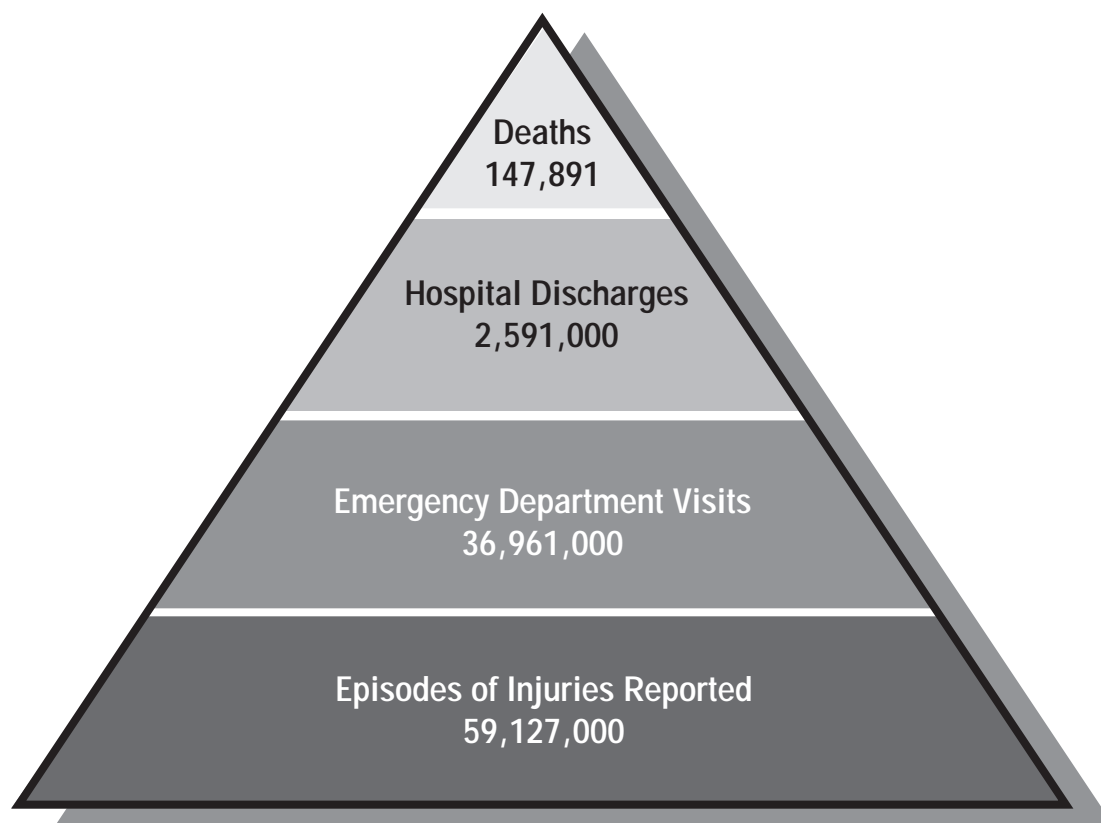
the Commonwealth. This document provides an analysis of injury-related deaths and hospitalizations among Virginia's children and adolescents ages 0-19 during the years 1994-1997. Each chapter examines the leading causes of injury by age group and intent and provides information on prevention for the purpose of increasing injury awareness among policymakers, public and private organizations, service providers, community groups, parents and caregivers.

B. The Injury Pyramid

As seen in Figure 3, researchers have developed the “injury pyramid” to demonstrate the relationship between injury morbidity and mortality. The National Center for Health Statistics estimates that for every injury death occurring in the United States, approximately 18 hospitalizations and 250 emergency department visits occur for people of all ages (Fingerhut LA, Warner M. Injury Chartbook. Health, United States 1996-1997). In Virginia, from 1994 to 1997, injuries accounted for more than 1,600 deaths and 20,000 hospitalizations among

Virginia’s children and adolescents ages 0-19. These deaths and hospitalizations, however, represent only a small portion of the much larger toll injuries are costing the Commonwealth. The information contained in this report does not address injuries treated in emergency rooms, physicians’ offices, homes, or injuries not treated at all. Although information on these injuries is often not readily available, it is important to consider these data sources when investigating the scope of the problem in your area.

Figure 3: Burden of Injury, All Ages, United States, 1995



Source: National Center for Health Statistics Health, United States, 1996-1997 and Injury Chartbook.

C. Leading Causes of Injury Death and Hospitalization

Deaths

Injuries claimed the lives of 1,682 children and adolescents in Virginia during the years 1994 to 1997, the equivalent of more than one injury death per day. The injury death rate for people under twenty is 23.4 deaths per 100,000 people. The six leading causes of injury death are illustrated in Figure 4. Of these deaths, motor vehicle-related injuries were the leading cause, accounting

for 39 percent of all injury fatalities. Firearm injuries ranked second, accounting for 26 percent of fatalities, while suffocation and drowning-related injuries ranked third and fourth, both accounting for 7 percent of injury fatalities. Fire and poisonings accounted for an additional 6 and 3 percent respectively.

Figure 4: Leading Causes of Injury Death, 1994-1997, Ages 0 - 19

	Freq.	%
Motor Vehicle	648	39%
Firearm	439	26%
Suffocation	122	7%
Drown/submersion	117	7%
Fire and burns	95	6%
Poisoning	55	3%
All other injuries	206	12%
Total	1682	100%

Figure 5: Leading Causes of Injury Hospitalization, 1994 - 1997, Ages 0 - 19

Hospitalizations

More than 20,000 children and adolescents were hospitalized for injuries from 1994-1997, resulting in a rate of 288 hospitalizations per 100,000 people under the age of twenty. As depicted in Figure 5, poisonings, motor vehicles, and falls ranked first, second and third accounting for approximately 65 percent of all injury hospitalizations, followed by striking injuries (7%) cutting and piercing injuries (4%) and firearms and bicycle injuries (3%).

	Freq.	%
Poisoning	4716	23%
Motor Vehicle	4623	22%
Fall	3990	19%
Striking injuries	1392	7%
Cuts and pierces	838	4 %
Firearm	726	4 %
Bicycle (non motor vehicle-related)	595	3 %
All other injuries	3905	19 %
Total	20785	100%

D. Injury Deaths and Hospitalizations by Intent

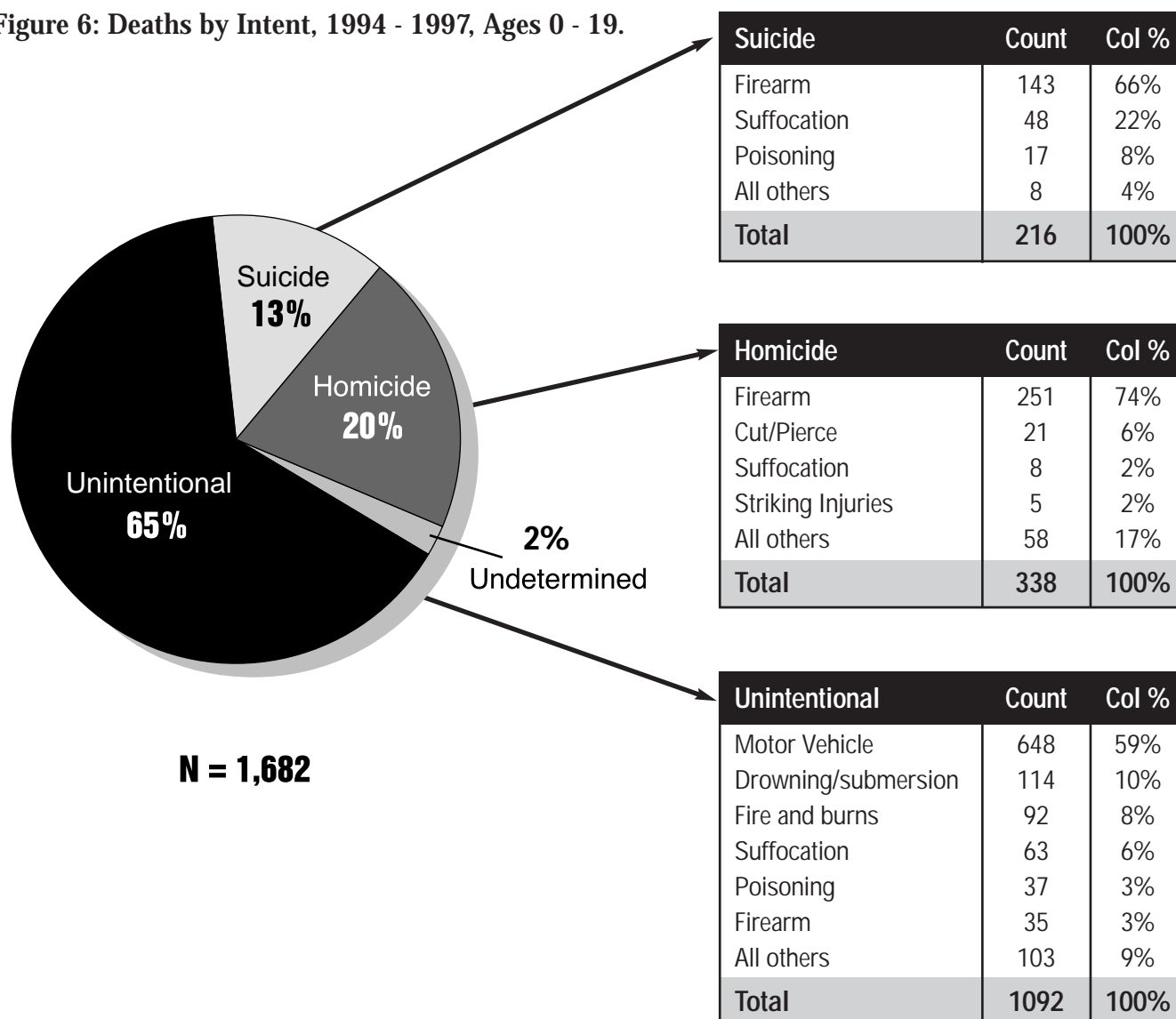
Deaths

Figure 6 reveals that of the 1,682 child and adolescent fatalities occurring between 1994 and 1997, unintentional injuries accounted for 65 percent of all injury deaths at a rate of 15.2/100,000. Intentional injuries, which include homicides and suicides, comprised 20 percent and 13 percent of all injury deaths respectively with rates of 4.7/100,000 and 3.0/100,000. Injuries of undetermined intent accounted for the remaining 2 percent.

As Figure 6 depicts, the leading types of injury deaths

vary by intent. For unintentional injury deaths, the leading causes were motor vehicles (59%), drowning/submersions (10%), fire and burns (8%), suffocations (6%), poisonings (3%) and firearms (3%). For homicides, firearms were the leading cause of injury death and accounted for almost three quarters of all injury deaths. Cutting and piercing injuries were the second leading cause, accounting for 6 percent of all homicides. The majority of suicides (66%) were a result of firearm injuries. The second and third leading causes were suffocations and poisonings.

Figure 6: Deaths by Intent, 1994 - 1997, Ages 0 - 19.

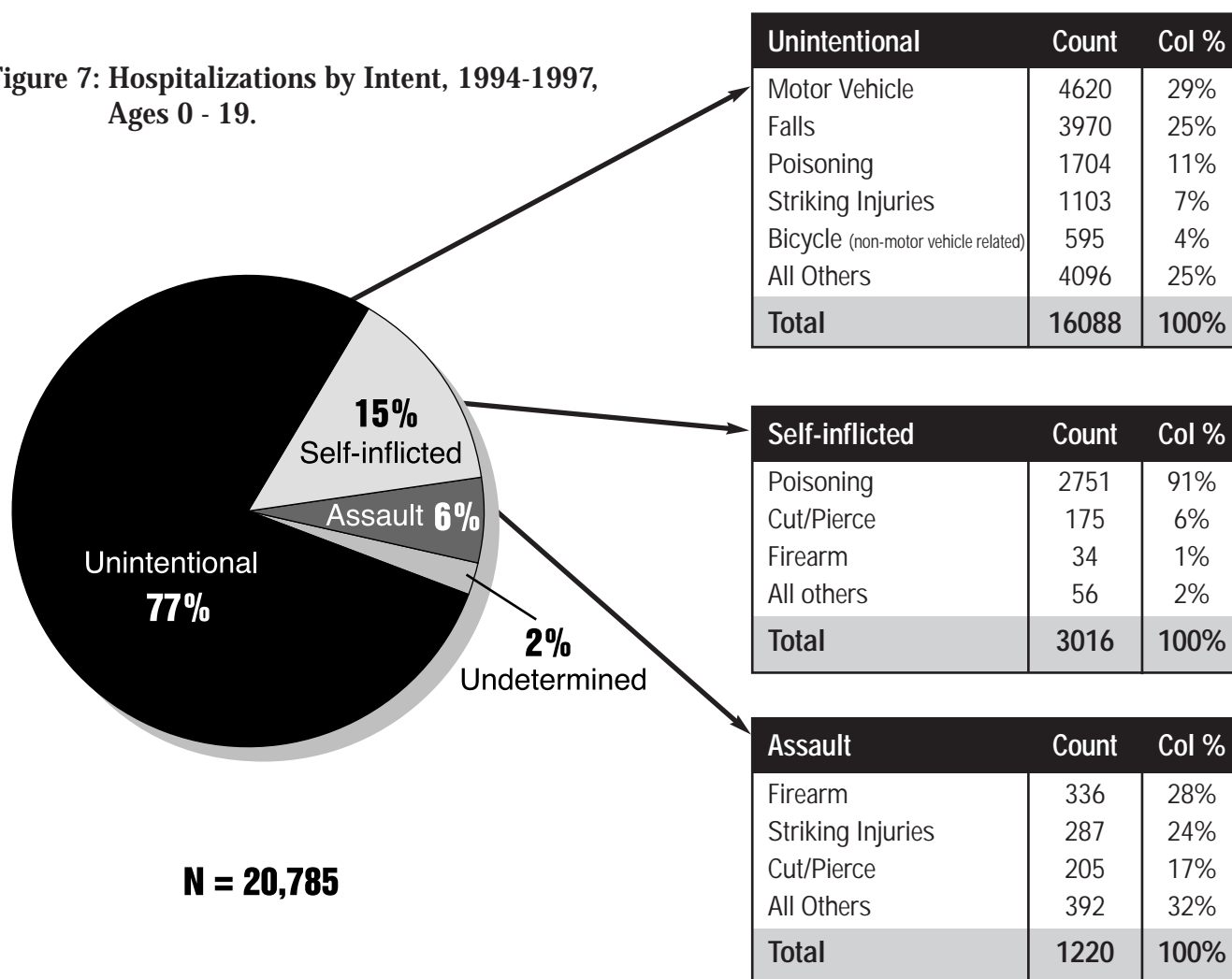


Hospitalizations

Figure 7 reveals that of the 20,785 child and adolescent hospitalizations that occurred between 1994 and 1997, unintentional injuries accounted for 77 percent with a rate of 223.4/100,000. Intentional injuries, which include self-inflicted injuries and assault, accounted for 15 percent and 6 percent respectively, with rates of 41.9/100,000 and 16.9/100,000. Injuries of undetermined intent accounted for the remaining 2 percent.

The leading types of injury hospitalization vary by intent. For unintentional injury hospitalizations, the leading causes were motor vehicles (29%), falls (25%), poisonings (11%), striking injuries (7%) and non-motor vehicle related bicycle injuries (4%). Most (91%) self-inflicted injuries were due to poisonings. The second and third leading causes were cutting and piercing injuries (6%) and firearms (1%). The leading causes of assault hospitalizations were firearms (28%), striking injuries (24%), and cutting and piercing injuries (17%).

Figure 7: Hospitalizations by Intent, 1994-1997, Ages 0 - 19.



E. Cost of Injury Hospitalizations

Injury related hospital admissions for the four-year period of 1994-1997 resulted in a total charge of more than \$148 million dollars with an annual charge of more than \$37 million dollars among Virginians ages 0-19. Total hospitalization charges and average charges per injury do not necessarily follow the rate of injury. For example, motor vehicle related injuries accounted for 22 percent of

all injuries, yet consumed 36% of all charges. Conversely, poisonings accounted for 23 percent of all injuries, yet only consumed 12 percent of all charges.

The injuries with the largest average cost per hospitalization were firearms (\$14,000), motor vehicles (\$11,600) and fire and flame injuries (\$10,800). See Figure 8.

Figure 8: Injury Related Costs for Virginia Hospitals, 1994-1997, Ages 0 - 19.

	Freq.	Average Charge	Four Year Total Charge	% of Charges	% of Hospitalizations
Poisoning	4,716	3,700	17,400,000	12	23
Motor Vehicle	4,623	11,600	53,100,000	36	22
Falls	3,990	5,300	21,100,000	14	19
Striking Injuries	1,392	5,700	7,900,000	5	7
Cut/pierce	838	6,000	5,000,000	3	4
Firearm	726	14,000	10,000,000	7	4
Bicycle (non-motor vehicle related)	595	5,800	3,500,000	2	3
Fire/Flame	214	10,800	2,300,000	2	1
All Injuries	20,785	\$ 7,100	\$ 148,000,000	100%	100%

Total charges have been rounded to nearest hundred thousand and average charges rounded to nearest hundred.

II.

Age Specific Analysis

A. Children Under One Year of Age

From 1994 to 1997, there were 90 injury deaths and more than 900 reported injury hospitalizations among children under one year of age, resulting in rates of 24.9/100,000 and 268.9/100,000 respectively. Unintentional injuries accounted for 64 percent of all injury deaths and 83 percent of all injury hospitalizations. Homicides accounted for an additional 27 percent of all injury deaths, and 12

percent of all injury hospitalizations were due to assault. Two percent of injury hospitalizations were reported as self-inflicted. However, as infants are incapable of intentionally inflicting harm upon themselves, this number most likely reflects coding error. Figures 9 and 10 illustrate the leading causes of injury death and hospitalization by intent among all children in this age group.

Figure 9: Deaths, 1994 - 1997.

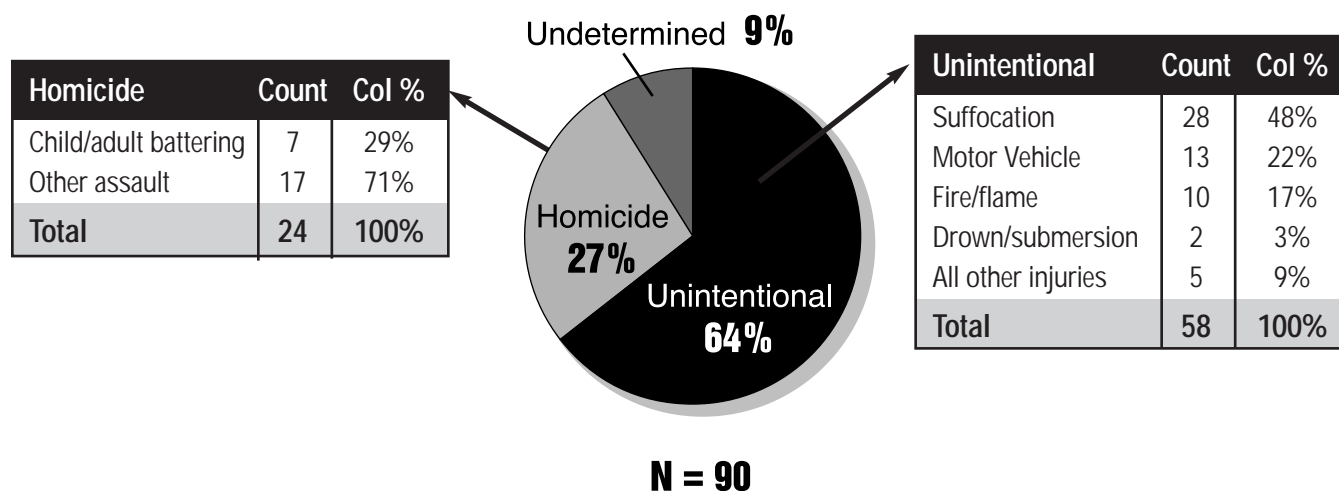
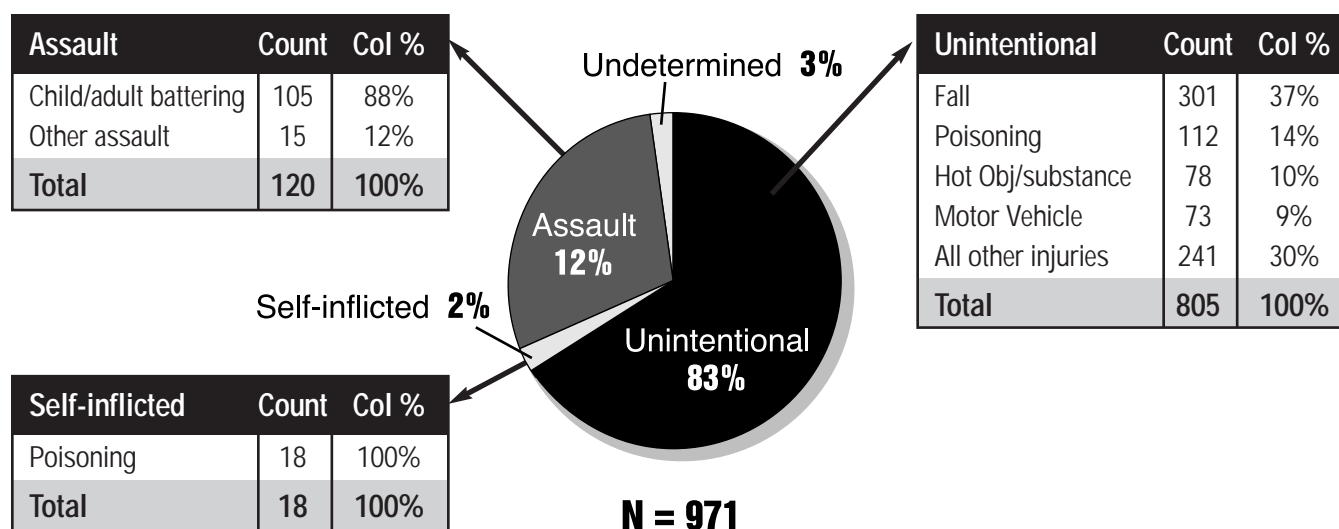


Figure 10: Hospitalizations, 1994 - 1997.



B. Children - Ages One to Four

From 1994 to 1997, there were 203 injury deaths and more than 3,400 reported injury hospitalizations among children one to four years of age, resulting in rates of 13.8/100,000 and 231.6/100,000 respectively. Unintentional injuries accounted for 84 percent of all injury deaths and 96 percent

of all injury hospitalizations. Homicides accounted for an additional 14 percent of injury deaths, and 3 percent of injury hospitalizations were due to assault. Figures 11 & 12 illustrate the leading causes of injury death and hospitalization by intent for all children in this age group.

Figure 11: Deaths, 1994 - 1997.

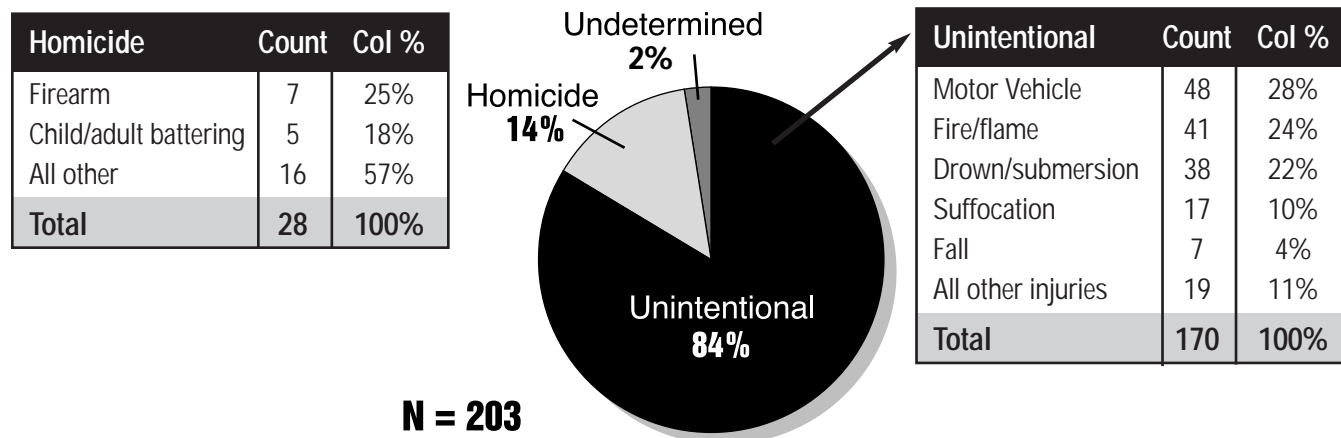
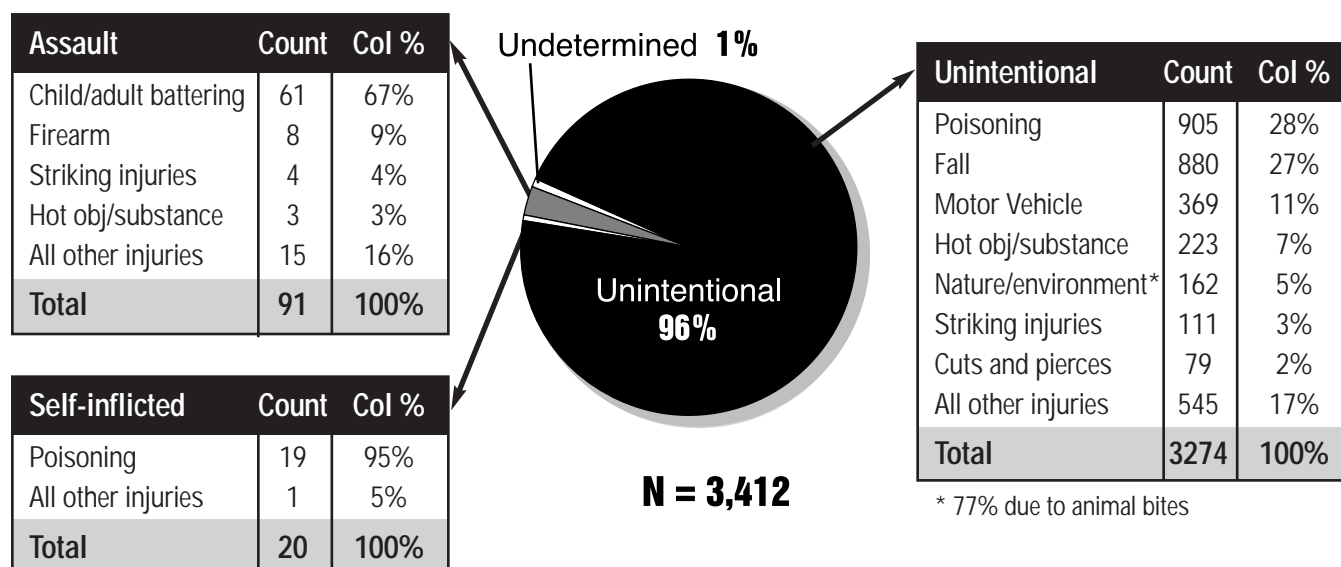


Figure 12: Hospitalizations, 1994 - 1997.



C. Children - Ages Five to Nine Years

From 1994 to 1997, there were 127 injury deaths and more than 2,900 reported injury hospitalizations among children five to nine years of age, with rates of 6.9/100,000 and 160.7/100,000 respectively. Unintentional injuries accounted for 86 percent of all injury deaths and 98 percent of all injury hospitalizations. Homicides accounted for an additional 8 percent of injury deaths and

1 percent of injury hospitalizations were due to assault. Suicides accounted for 2 percent of all injury deaths and less than 1 percent of injury hospitalizations were reported as self-inflicted. Figures 13 & 14 illustrate the leading causes of injury death and hospitalization by intent for all children in this age group.

Figure 13: Deaths, 1994 - 1997.

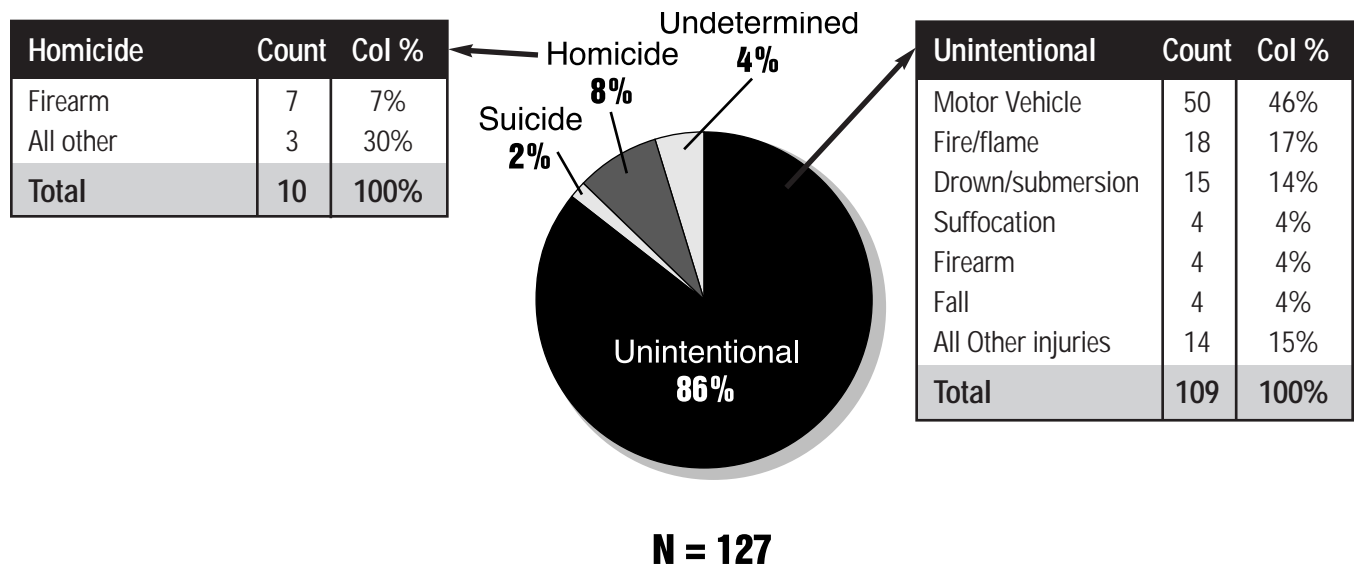
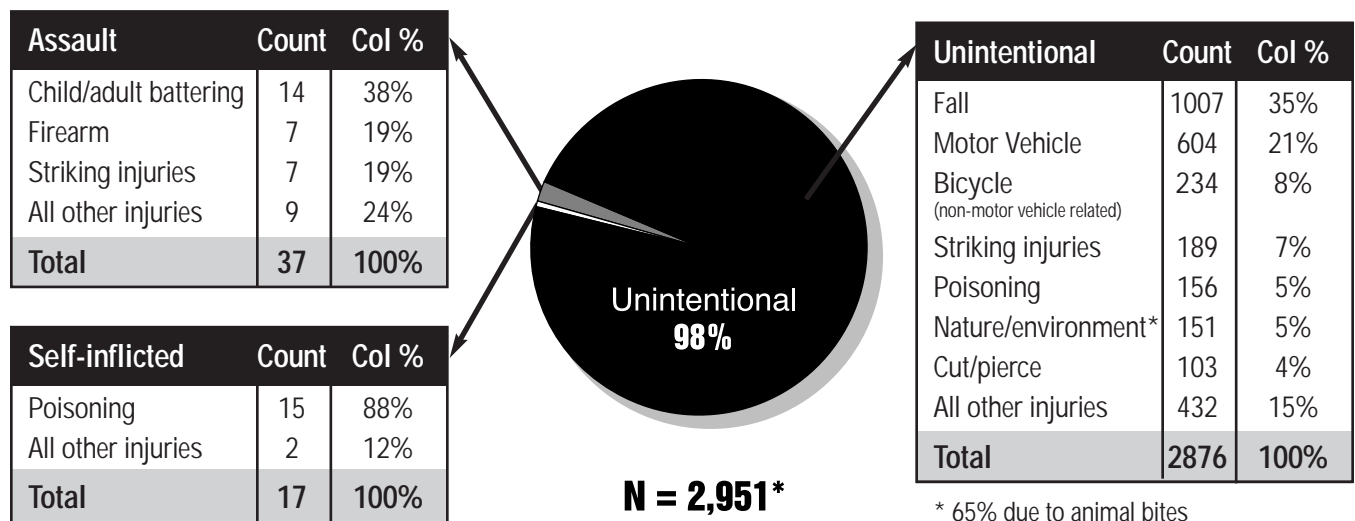


Figure 14: Hospitalizations, 1994 - 1997.



* 21 injuries of undetermined intent not displayed in pie graph.

D. Children - Ages Ten to Fourteen

From 1994 to 1997, there were 221 injury deaths and more than 4,100 injury hospitalizations among children 10 to 14 years of age, with rates of 12.5/100,000 and 233.1/100,000 respectively. Unintentional injuries accounted for 71 percent of all injury deaths and 79 percent of all injury hospitalizations. Homicides accounted for an additional 11 percent of all injury deaths

and 3 percent of injury hospitalizations were due to assault. Suicides accounted for 16 percent of all injury deaths and 16 percent of injury hospitalizations were reported as self-inflicted. Figures 15 & 16 illustrate the leading causes of injury death and hospitalization by intent for all children in this age group.

Figure 15: Deaths, 1994 - 1997.

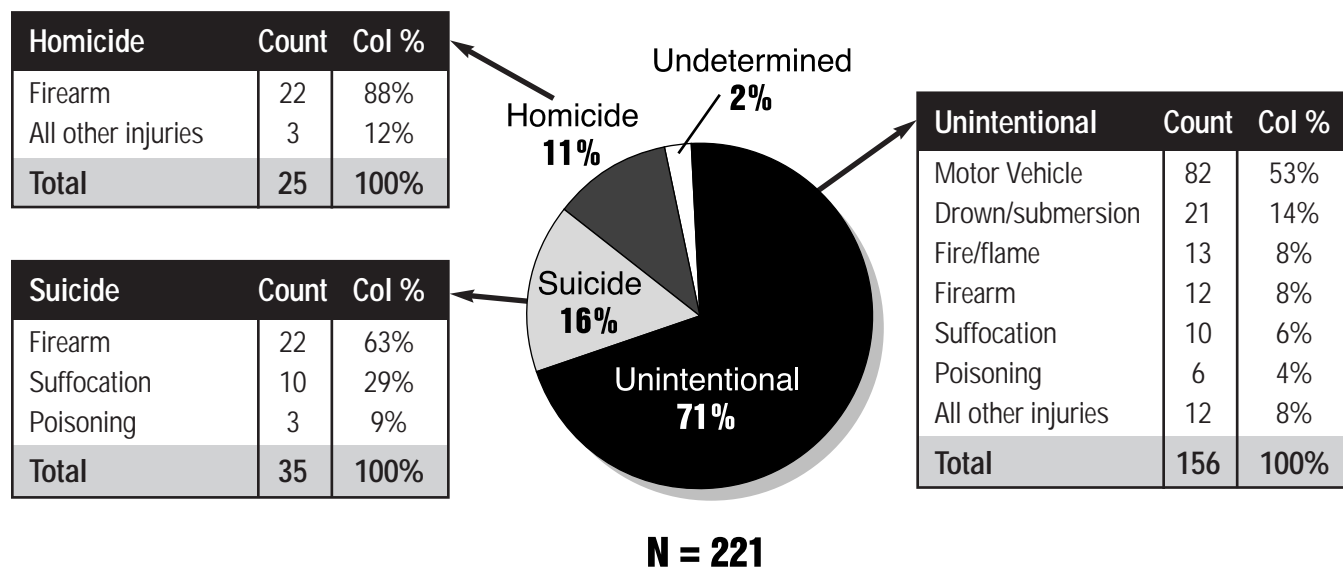
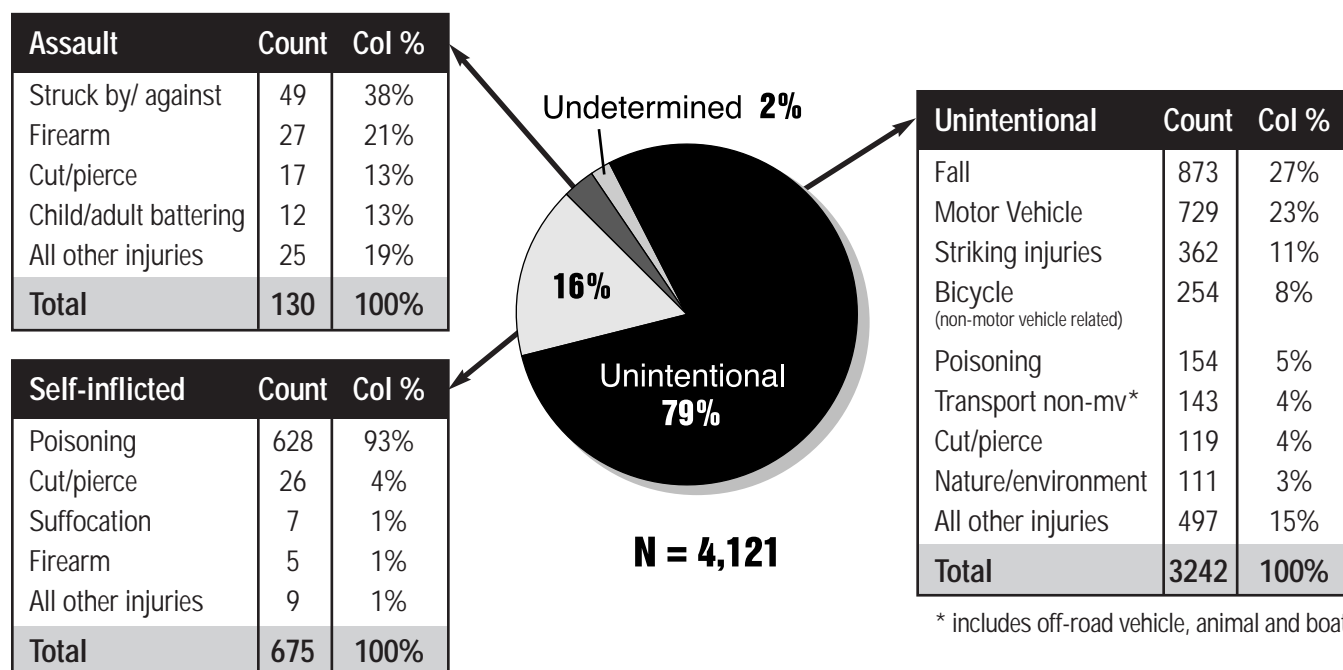


Figure 16: Hospitalizations, 1994 - 1997.



E. Adolescents - Ages Fifteen to Nineteen

From 1994 to 1997, there were 1,041 reported injury deaths and more than 9,000 reported injury hospitalizations among children 15 to 19 years of age, with rates of 59.0/100,000 and 528.9/100,000 respectively. Unintentional injuries accounted for 58 percent of all injury deaths and 63 percent of all injury hospitalizations. Homicides accounted for an additional

24 percent of injury deaths, and 9 percent of injury hospitalizations were due to assault. Suicides accounted for 17 percent of all injury deaths and 25 percent of injury hospitalizations were reported as self-inflicted. Figures 17 & 18 illustrate the leading causes of injury death and hospitalization by intent among all children in this age group.

Figure 17: Deaths, 1994 - 1997.

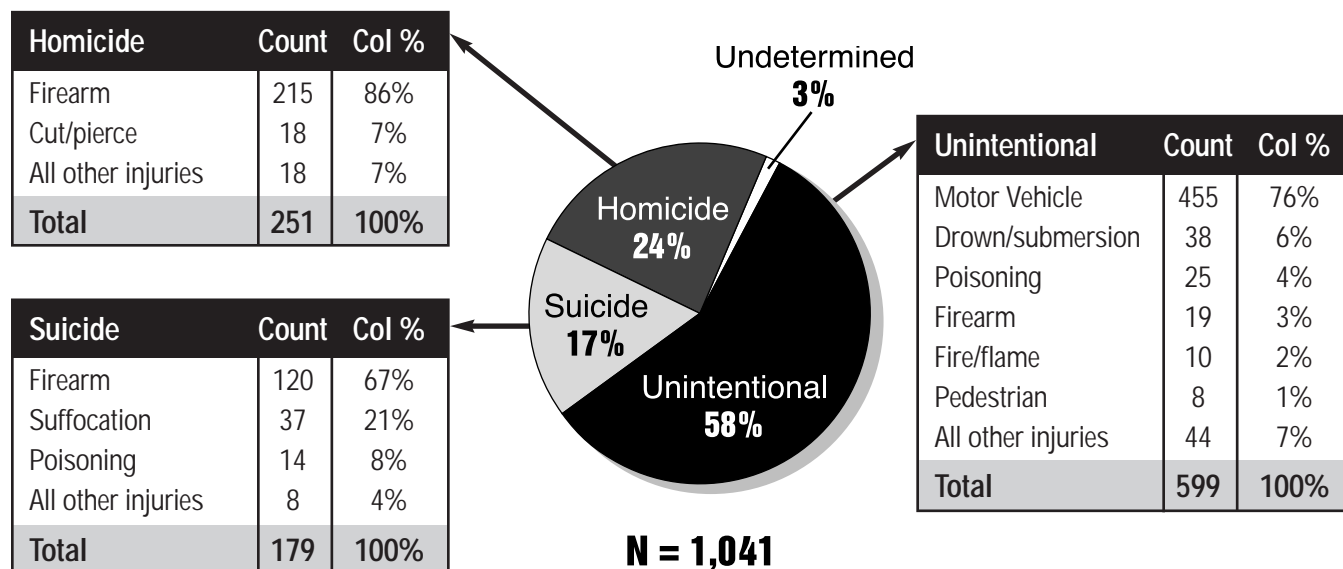
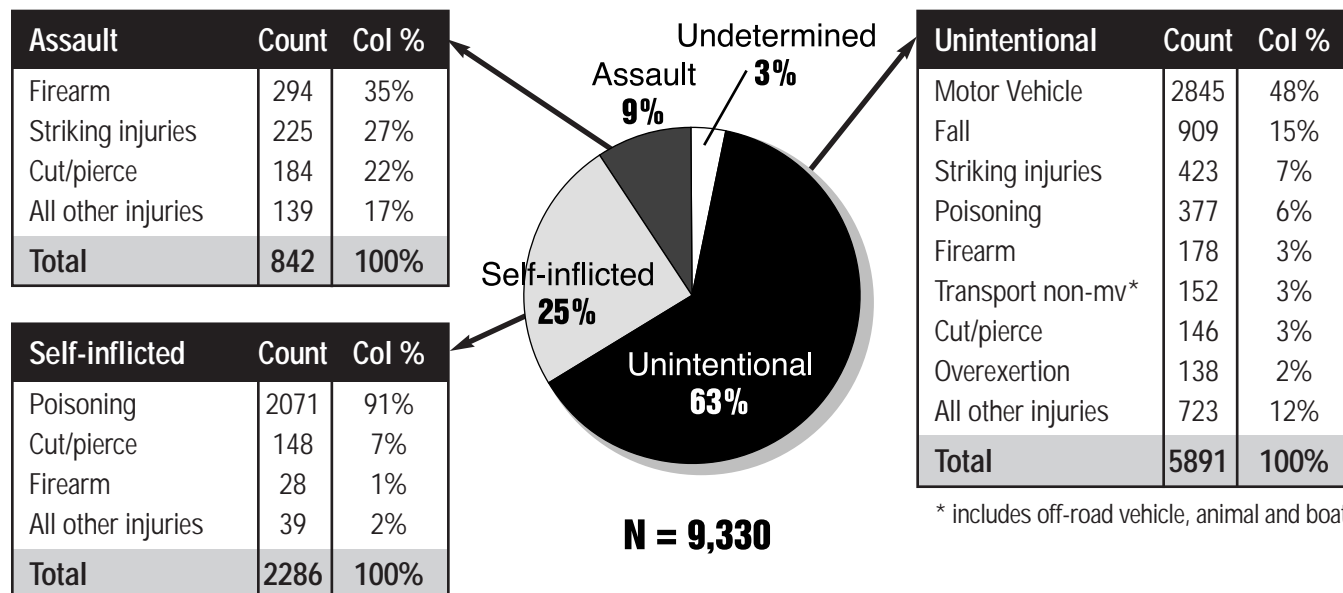


Figure 18: Hospitalizations, 1994 - 1997.



III.

Selected Causes of Injury: a Closer Look

A. Unintentional Motor Vehicle Injury

As seen in Figure 19, males accounted for 63 percent of all motor vehicle related fatalities and 59 percent of all hospitalizations. The fatality rate for males was 1.5 times the female rate with rates of 11.0/100,000 and 6.9/100,000 respectively. The hospitalization rate for males was more than 1.3 times the female rate with 74.5/100,000 and 53.3/100,000 respectively.

Motor vehicle-related fatality rates for blacks and whites were similar with rates 9.9/100,000 and 9.0/100,000 respectively. Hospitalization rates for blacks were higher than that of whites with rates of 67.7/100,000 and 56.5/100,000 respectively.

From 1994 to 1997, 648 young people under the age of 20 were killed in motor vehicle-related incidents; as seen in Figure 20, 87 percent were occupants, ten percent were pedestrians, and four percent involved bicycles

or motorcycles.

In addition to the 648 deaths, there were 4,623 motor vehicle-related hospitalizations. As seen in Figure 20, 77 percent of these hospitalizations were occupants, 13 percent were pedestrians, 5 percent were bicycle-related injuries, 4 percent were motorcycle-related injuries and 2 percent were unknown. Motor vehicle-related injuries accounted for 22 percent of all injury hospitalizations among children and adolescents under the age of 20, resulting in an average of 3 hospitalizations per day. Hospitalizations due to motor vehicle-related injuries cost an average charge of more than \$11,000 per hospitalization and totaled more than \$13.2 million dollars per year.

As seen in Figure 21, the frequency of both fatal and nonfatal motor vehicle-injury increases with age.

Figure 19: Motor Vehicle Injury by Sex and Race, 1994 - 1997, Ages 0 - 19.

FATAL				NONFATAL			
SEX	Freq.	%	Rate*	SEX	Freq.	%	Rate
Male	405	63%	11.0	Male	2749	59%	74.5
Female	243	38%	6.9	Female	1872	41%	53.3
Total	648	100%	9.0	Unknown	2	-	-
				Total	4623	100%	64.2
RACE	Freq.	%	Rate*	RACE	Freq.	%	Rate
White	468	72%	9.0	White	2954	64%	56.5
Black	157	24%	9.3	Black	1147	25%	67.7
Other	21	3%	7.6	Other	92	2%	33.1
Unknown	2	-	-	Unknown	430	9%	-
Total	648	100%	9.0	Total	4623	100%	64.2

* rates were not computed for fewer than 20 cases

Figure 20: Types of Motor Vehicle Injury, 1994 - 1997, Ages 0 - 19

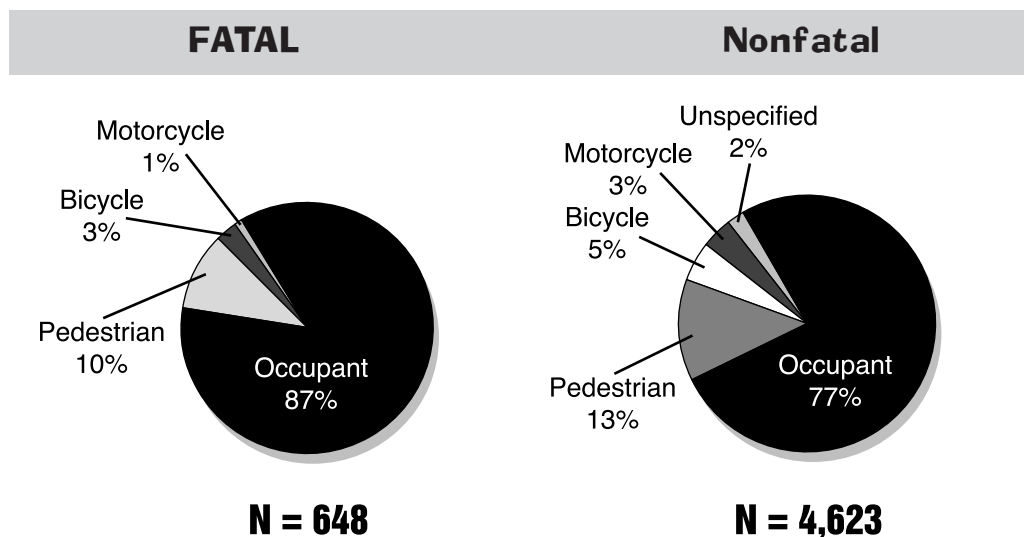
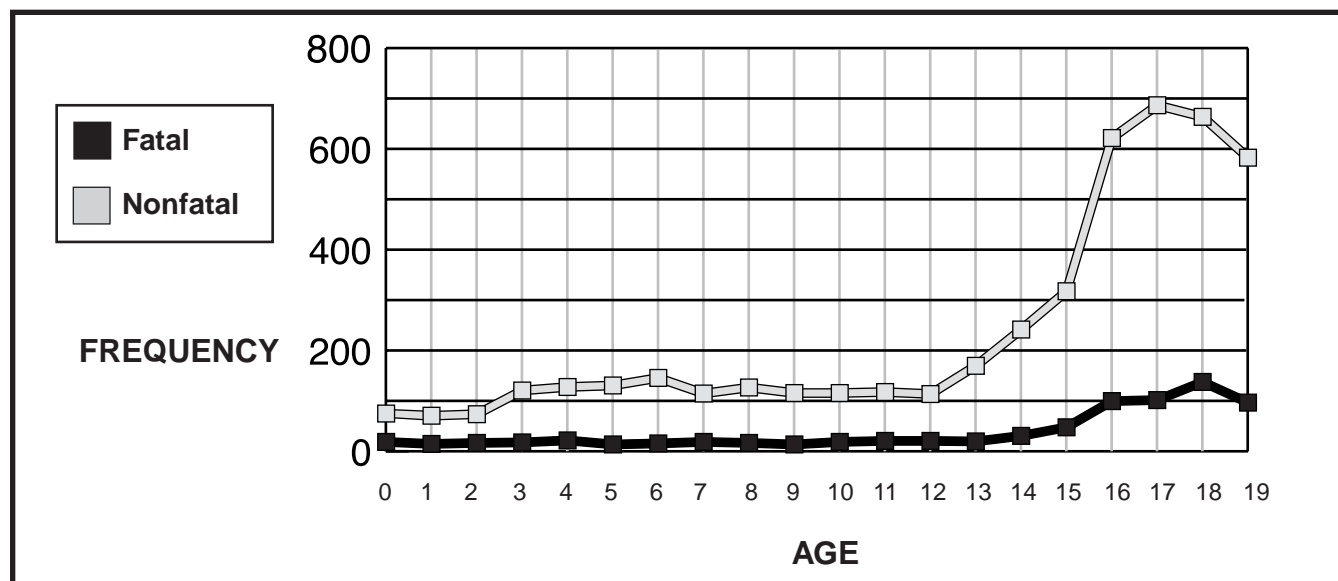


Figure 21: Fatal and Nonfatal Motor Vehicle Injury by Single Year of Age, 1994 - 1997, Ages 0 - 19



Motor Vehicle Injury Prevention

- Reduce misuse of safety restraints by providing drivers with education and training about proper child safety seat installation.
- Ensure that low-income families have access to child restraints for their children.
- Ensure that all communities have access to adequately trained child safety seat installation professionals.
- Implement community-based child passenger safety campaigns that emphasize air bag safety, age appropriate restraints and the benefit of seating children in the back seat, pedestrian safety and road safety.
- Increase child passenger safety education for police, firefighters, educators, childcare providers, physicians, nurses, hospital staff and automobile dealership staff.
- Promote current statewide safety seat and seat belt laws.
- Integrate passenger safety education and activities into school and preschool curricula for all children.
- Increase pediatrician counseling regarding motor vehicle injury prevention.

B. Unintentional Drowning and Submersion

From 1994 to 1997, 114 young people under the age of 20 drowned with a rate of 1.6/100,000 people in this age group. As seen in Figure 22, 55 percent of the deaths occurred in a swimming pool, 17 percent occurred during recreation or sport, 7 percent occurred in a bathtub and 21 percent occurred in an unspecified place.

In addition to the 114 deaths, there were 139 hospitalizations due to submersion. Of these 139 hospitalizations, 54 percent occurred in a swimming pool, 17 percent occurred during recreation or sport (not in a swimming pool), 14 percent occurred in a bathtub and 8 percent occurred while diving (with diving equipment). Hospitalizations due to submersions had an average charge of more than \$9,200 per hospitalization and more than \$300,000 dollars per year.

As seen in Figure 23, males made up 74 percent of all fatalities and 61 percent of all hospitalizations. The drowning rate for males was almost 3 times the female rate with rates of 2.3/100,000 and 0.9/100,000 respectively. The hospitalization rate for males was more than 1.5 times the female rate with 2.3/100,000 and 1.5/100,000 respectively.

Blacks had a drowning death rate 2.3 times the white rate with 2.8/100,000 and 1.2/100,000 respectively. Hospitalization rates for blacks were higher than that of whites with rates of 2.5/100,000 and 1.5/100,000 respectively.

Figure 24 illustrates the distribution of fatal and nonfatal drowning and submersions by single year of age.

Figure 22: Types of Drowning and Submersion, 1994 - 1997, Ages 0 - 19.

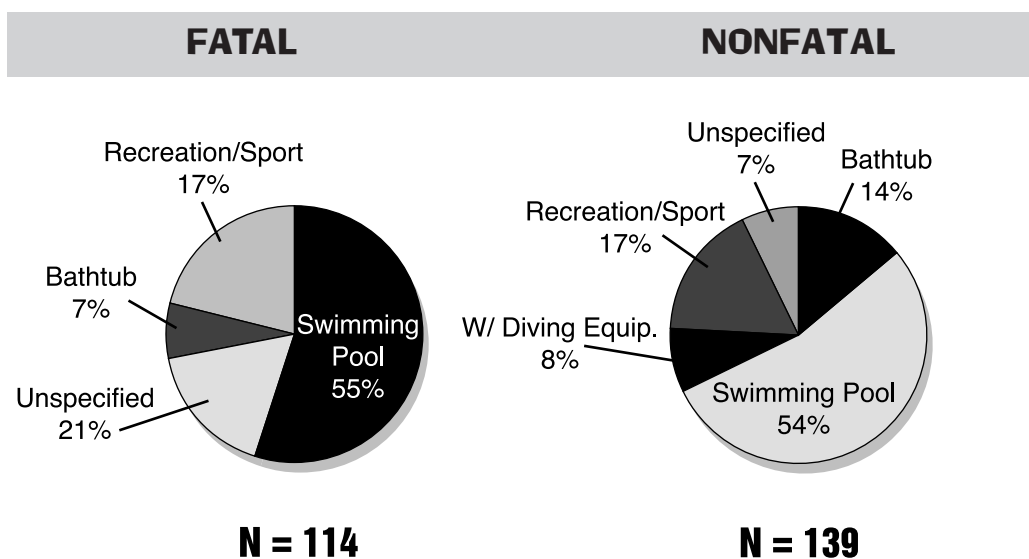


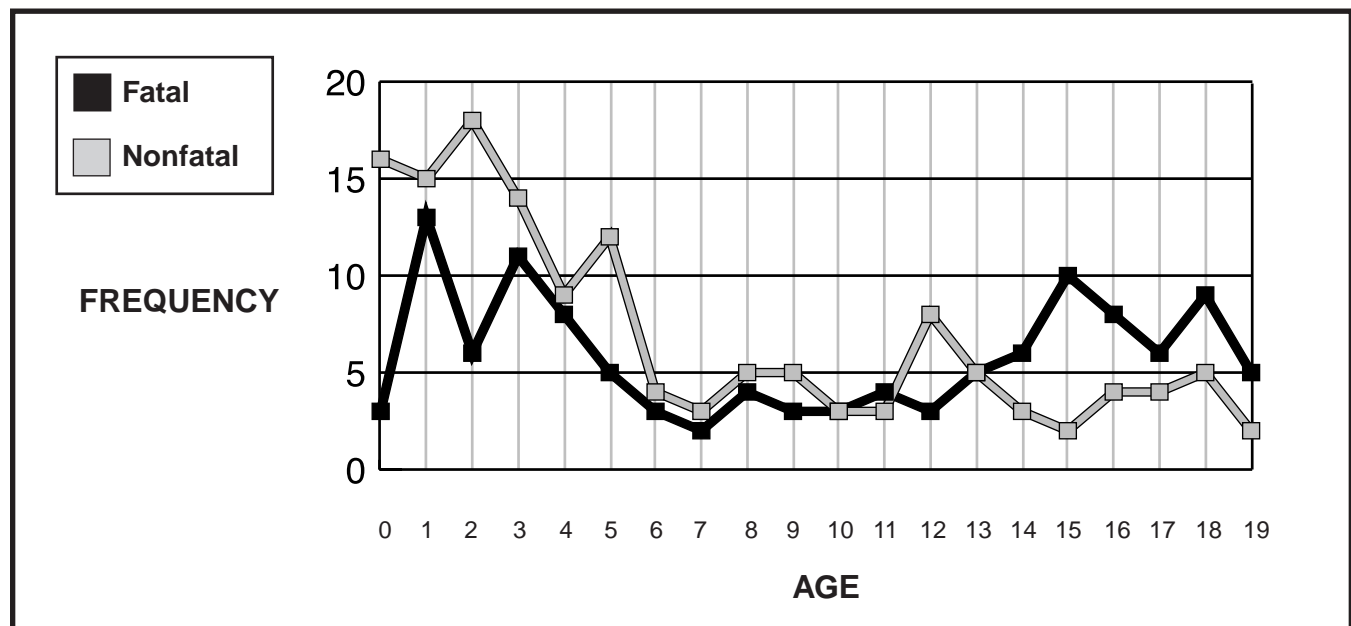
Figure 23: Drowning and Submersion by Sex and Race, 1994 - 1997, Ages 0 - 19.

FATAL				NONFATAL			
SEX	Freq.	%	Rate	SEX	Freq.	%	Rate
Male	84	74%	2.3	Male	85	61%	2.3
Female	30	26%	0.9	Female	54	39%	1.5
Total	114	100%	1.6	Total	139	100%	1.9

RACE	Freq.	%	Rate	RACE	Freq.	%	Rate
White	63	55%	1.2	White	79	57%	1.5
Black	48	43%	2.8	Black	42	30%	2.5
Other	3	-	-	Other	1	1%	-
Total	114	100%	1.6	Unknown	17	12%	-
				Total	139	100%	1.9

* rates were not computed for fewer than 20 cases

Figure 24: Fatal and Nonfatal Drowning and Submersion by Single Year of Age, 1994 - 1997, Ages 0 - 19.



Drowning and Submersion Prevention

- Increase efforts to raise parental awareness of the dangers of young children drowning in swimming pools, spas, bathtubs, buckets, toilets and unprotected bodies of water.
- Increase pediatrician counseling regarding drowning prevention.
- Increase the number of pools with fencing that completely encircles the pool, self-closing, self-latching gates and pool alarm systems.
- Increase fencing around canals and ditches that run through densely populated areas.
- Increase the presence of certified lifeguards at public swimming pools, beaches and other bodies of water.
- Develop efforts to train health care providers in drowning prevention and encourage them to teach patients about water safety and drowning prevention.
- Increase the number of students, parents and caregivers completing CPR and first aid training classes.
- Increase access to EMS in rural areas.
- Integrate drowning prevention and water safety activities into school curricula for all children.
- Increase awareness about the importance of wearing a personal floatation device (life jacket) by all passengers in powered or unpowered watercraft and anyone who doesn't know how to swim.

C. Unintentional Fire and Burns

From 1994 to 1997, 92 young people under the age of 20 died as a result of fires and burns producing a rate of 1.3/100,000 people in this age group.

In addition to the 92 deaths, there were 582 hospitalizations. Hospitalizations due to fire and burns had an average charge of more than \$7,300 per hospitalization and more than 1.1 million dollars per year.

As seen in Figure 25, the fire and burn death rate for males was similar to the female rate with rates of 1.4/100,000 and 1.2/100,000 respectively. Males had a

higher fire and burn hospitalization rate compared with females with rates of 9.8/100,000 and 6.3/100,000 respectively.

Blacks had a fire and burn death rate almost 2.5 times the white rate with 2.5/100,000 and 1.0/100,000 respectively. Blacks also had a fire and burn hospitalization rate almost 2.5 times the white rate with 14.3/100,000 and 5.5/100,000 respectively.

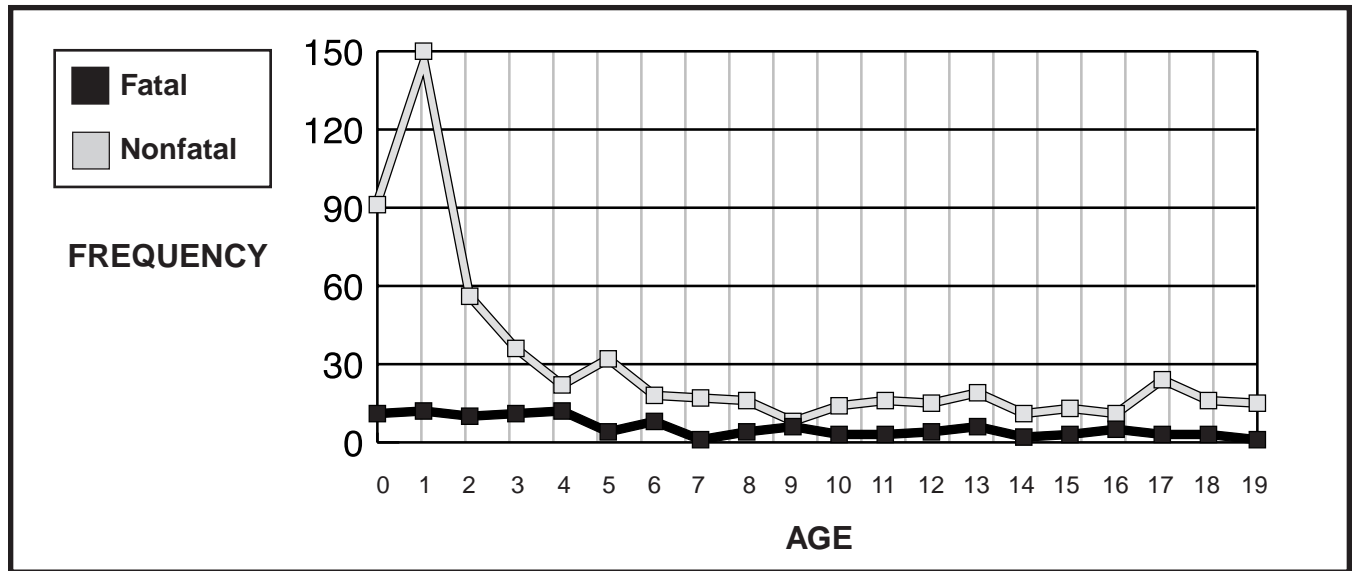
Figure 26 displays the frequency of fatal and nonfatal injuries by single year of age.

Figure 25: Unintentional Fire and Burns by Sex and Race, 1994 - 1997, Ages 0 - 19.

FATAL				NONFATAL			
SEX	Freq.	%	Rate	SEX	Freq.	%	Rate
Male	51	55%	1.4	Male	360	61%	9.8
Female	41	45%	1.2	Female	222	39%	6.3
Total	92	100%	1.3	Total	582	100%	8.1
RACE	Freq.	%	Rate	RACE	Freq.	%	Rate
White	50	54%	1.0	White	290	51%	5.5
Black	42	46%	2.5	Black	242	41%	14.3
Total	92	100%	1.3	Other	19	3%	-
				Unknown	31	5%	-
				Total	582	100%	8.1

* rates were not computed for fewer than 20 cases

Figure 26: Fatal and Nonfatal Fire and Burns by Single Year of Age, 1994 - 1997, Ages 0 - 19.



Fire and Burn Prevention

- Create public campaigns to promote fire and burn prevention education targeting populations at risk.
- Increase awareness of the availability and reduced cost of smoke alarms with long-life batteries and automatic home fire sprinkler systems to increase consumer demand for and use of these new technologies.
- Integrate fire and burn injury prevention activities into school and preschool curricula for all children.
- Increase pediatrician counseling regarding fire and burn injury prevention.
- Install smoke alarms, automatic home fire sprinkler systems, window guards that do not impede emergency egress, and anti-scald plumbing devices in all homes.
- Increase awareness about basic first aid for burns.
- Increase awareness on ways to prevent fires around the home and the importance of planning and practicing a fire escape plan.

D. Unintentional Suffocation

From 1994 to 1997, there were 63 deaths and 120 hospitalizations to children and adolescents under the age of 20 because of suffocation resulting in rates of 0.9/100,000 and 1.7/100,000. The leading causes of fatal suffocation are choking on food or other objects (such as beans or marbles), unintentional hangings, and mechanical suffocation in beds, cradles, etc. For nonfatal injuries, the majority of victims (98%), choked on food or other objects. See Figure 27.

As seen in Figure 28, the death rate for males was almost double the rate of females (1.1/100,000 and .6/100,000

respectively). The hospitalization rate for males was also higher than the female rate with rates of 1.9/100,000 and 1.5/100,000 respectively.

Blacks had a higher rate of suffocation deaths compared to whites with rates of 1.4/100,000 and 0.8/100,000 respectively. The black hospitalization rate was also higher than whites with rates of 1.9/100,000 and 1.3/100,000 respectively.

Figure 29 displays the distribution of fatal and nonfatal suffocations by single year of age.

Figure 27: Leading Causes of Fatal and Nonfatal Suffocation, 1994 - 1997, Ages 0 - 19.

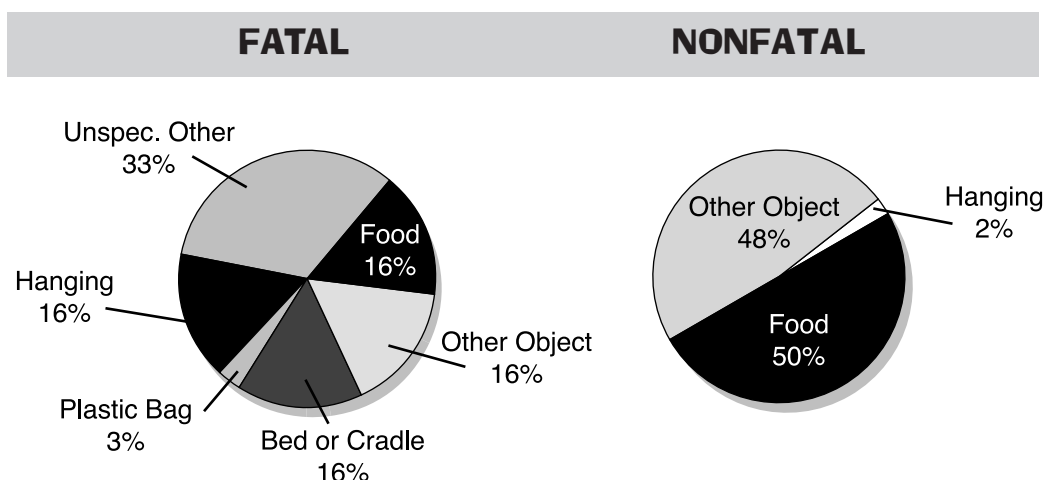


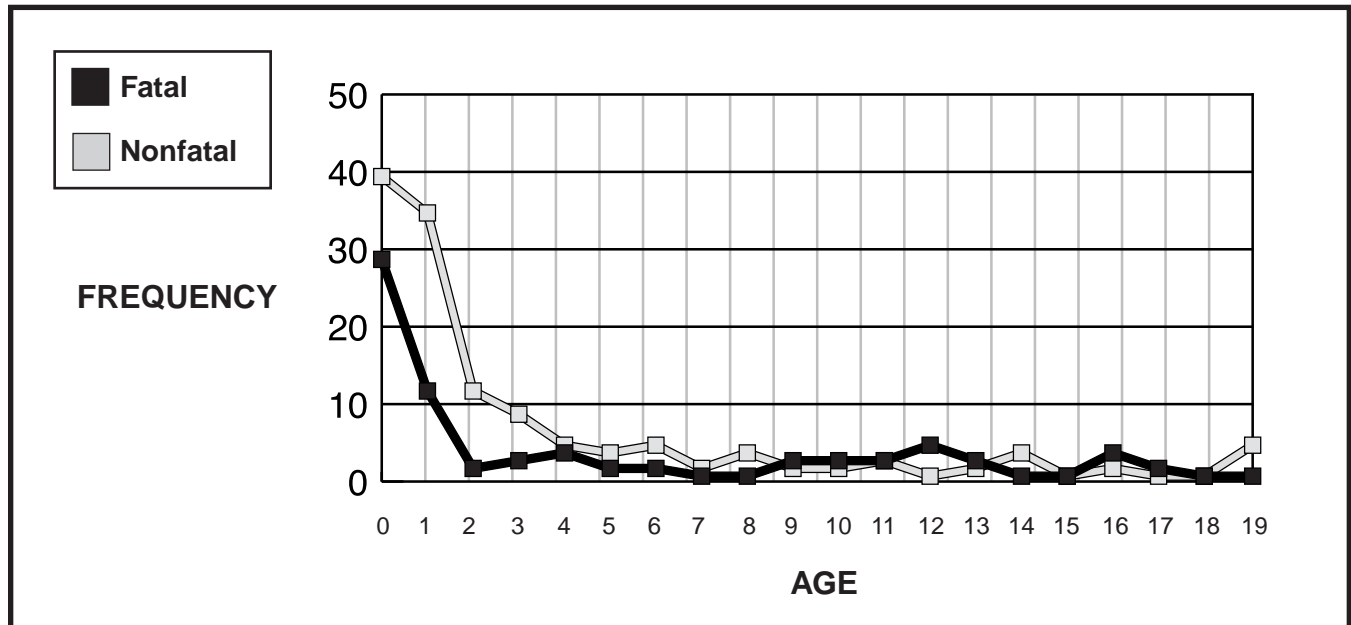
Figure 28: Unintentional Suffocation by Race and Sex, 1994 - 1997, Ages 0 - 19.

FATAL				NONFATAL			
SEX	Freq.	%	Rate	SEX	Freq.	%	Rate
Male	42	67%	1.1	Male	69	57%	1.9
Female	21	33%	0.6	Female	51	44%	1.5
Total	63	100%	0.9	Total	120	100%	1.7

RACE	Freq.	%	Rate	RACE	Freq.	%	Rate
White	39	62%	0.8	White	70	58%	1.3
Black	24	38%	1.4	Black	32	27%	1.9
Total	63	100%	0.9	Other	18	15%	-
				Total	120	100%	1.7

* rates were not computed for fewer than 20 cases

Figure 29: Fatal and Nonfatal Suffocations by Single Year of Age, 1994 - 1997, Ages 0 - 19.



Suffocation Prevention

- Educate parents and caregivers about the food and non-food items that are most likely to cause choking deaths in children.
- Promote use of mylar balloons in place of latex balloons around children.
- Eliminate drawstrings from children's clothing.
- Educate parents about the hazards posed by window blind cords and other entanglement hazards.
- Integrate choking and suffocation prevention activities into school curricula for all children.
- Increase pediatrician counseling regarding choking and suffocation prevention.
- Raise awareness of the importance of placing infants on their backs to sleep and removing soft bedding, blankets, pillows, etc. from the sleeping area.
- Educate parents with small children to read labels on toys prior to purchasing them and to check all toys for loose, missing, or broken parts that could cause choking.

E. Unintentional Poisoning

From 1994 to 1997, 37 young people under the age of 20 died due to poisoning with a poisonings rate of 0.5/100,000 people in this age group. The leading causes of poisoning appear in Figure 30.

In addition to the 37 deaths, there were 1704 hospitalizations due to poisonings. As seen in Figure 31, the majority of hospitalizations were due to drugs (prescription and non-prescription). Hospitalizations due to poisoning had an average charge of more than \$3,000 per

hospitalization and more than \$1.4 million dollars per year.

As seen in Figure 32, the hospitalization rate for males was higher than the female rate with rates of 25.4/100,000 and 21.8/100,000 respectively. Blacks had a poisoning hospitalization rate 1.7 times the white rate with 32.1/100,000 and 18.1/100,000 respectively.

Figure 33 displays the frequency of fatal and nonfatal injuries by single year of age.

Figure 30: Leading Causes of Poisoning Deaths, 1994 - 1997, Ages 0 - 19.

N = 37

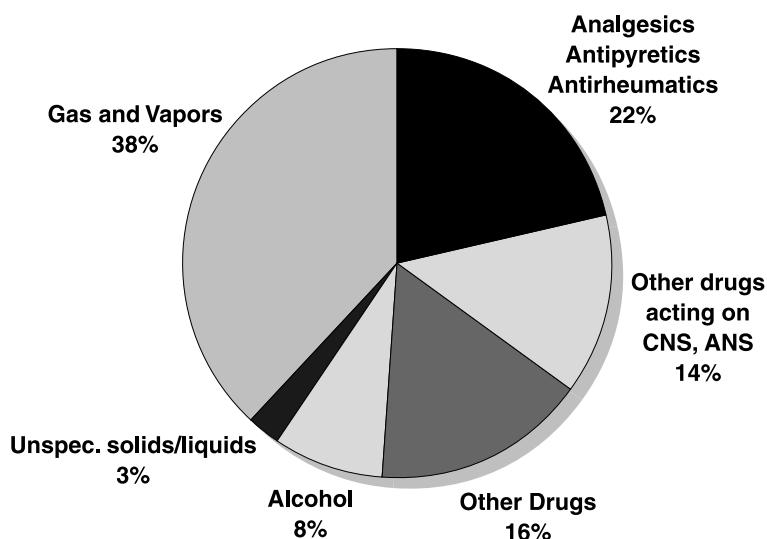


Figure 31: Unintentional Poisoning Hospitalizations, 1994 - 1997, Ages 0 - 19.

N = 1,704

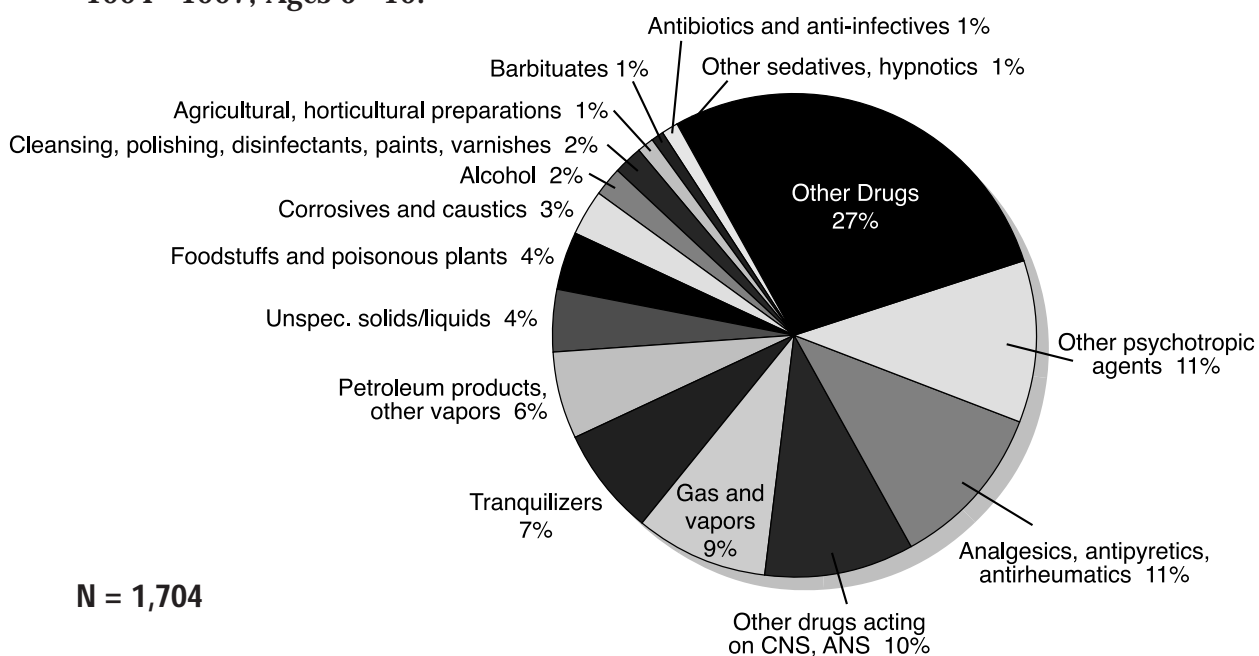
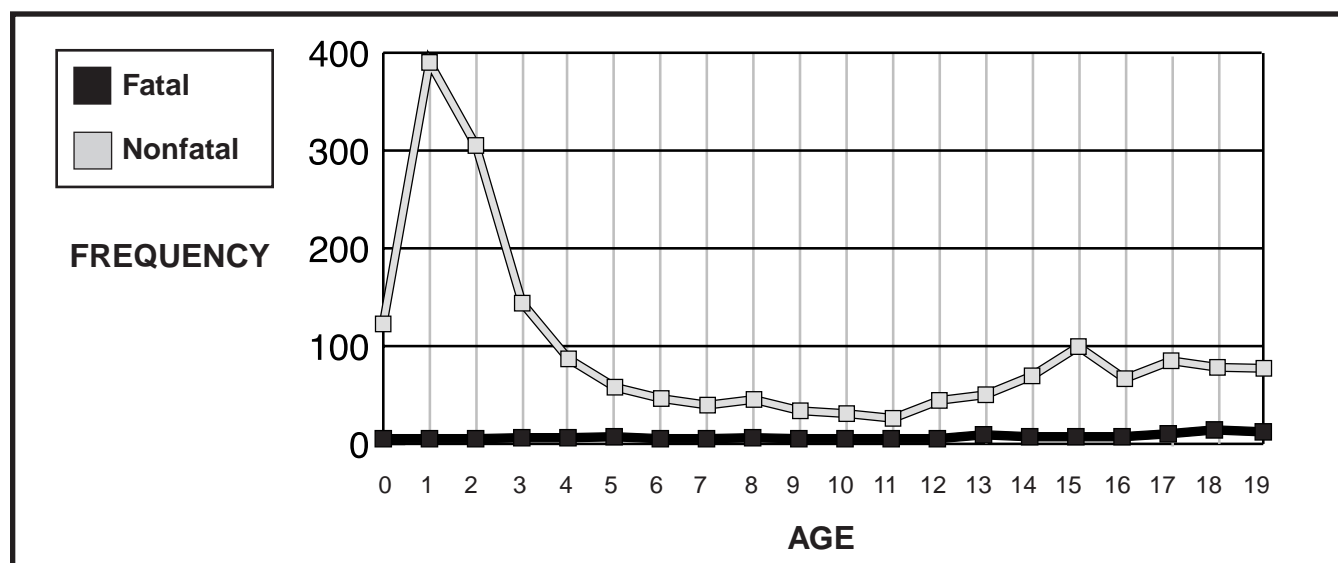


Figure 32: Poisoning Injury by Sex and Race, 1994 - 1997, Ages 0 - 19.

FATAL				NONFATAL			
SEX	Freq.	%	Rate	SEX	Freq.	%	Rate
Male	24	65%	0.7	Male	938	55%	25.4
Female	13	35%	-	Female	765	45%	21.8
Total	37	100%	0.5	Unknown	1	0.1%	-
				Total	1704	100%	23.7
RACE	Freq.	%	Rate	RACE	Freq.	%	Rate
White	25	68%	0.5	White	948	56%	18.1
Black	12	32%	-	Black	544	32%	32.1
Total	37	100%	0.5	Other	25	2%	9.0
				Unknown	187	11%	-
				Total	1704	100%	23.7

* rates were not computed for fewer than 20 cases

Figure 33: Fatal and Nonfatal Poisonings by Single Year of Age, 1994 - 1997, Ages 0 - 19.



Poisoning Prevention

- Increase awareness of the need to call a poison control center immediately in the event of a possible poisoning.
- Ensure all families have Ipecac Syrup on hand and poison control numbers posted on their phones.
- Integrate poison prevention activities into school and preschool curricula for all children.
- Increase pediatrician counseling regarding poisoning prevention.
- Continue public education on the dangers of carbon monoxide, lead and other poisonous products.
- Increase awareness of the benefits of safe storage and devices that prohibit child access.

F. Unintentional Firearm Injury

From 1994 to 1997, 35 young people under the age of 20 were killed by unintentional firearm shootings and an additional 248 were hospitalized in Virginia. Unintentional firearm shootings represented 8 percent of all firearm deaths and 34 percent of all firearm hospitalizations.

Hospitalizations due to unintentional firearm injuries had an average charge of more than \$11,000 per hospitalization and a total of more than \$680,000 dollars per year. Figure 24 illustrates the distribution of fatal and nonfatal unintentional firearm injuries by sex and race.

Males make up 86 percent of all fatalities and 87 percent of all hospitalizations, with corresponding rates of .8/100,000 and 5.9/100,000 respectively.

Blacks have a much higher rate of hospitalization compared to whites with rates of 7.6/100,000 and 1.9/100,000 respectively.

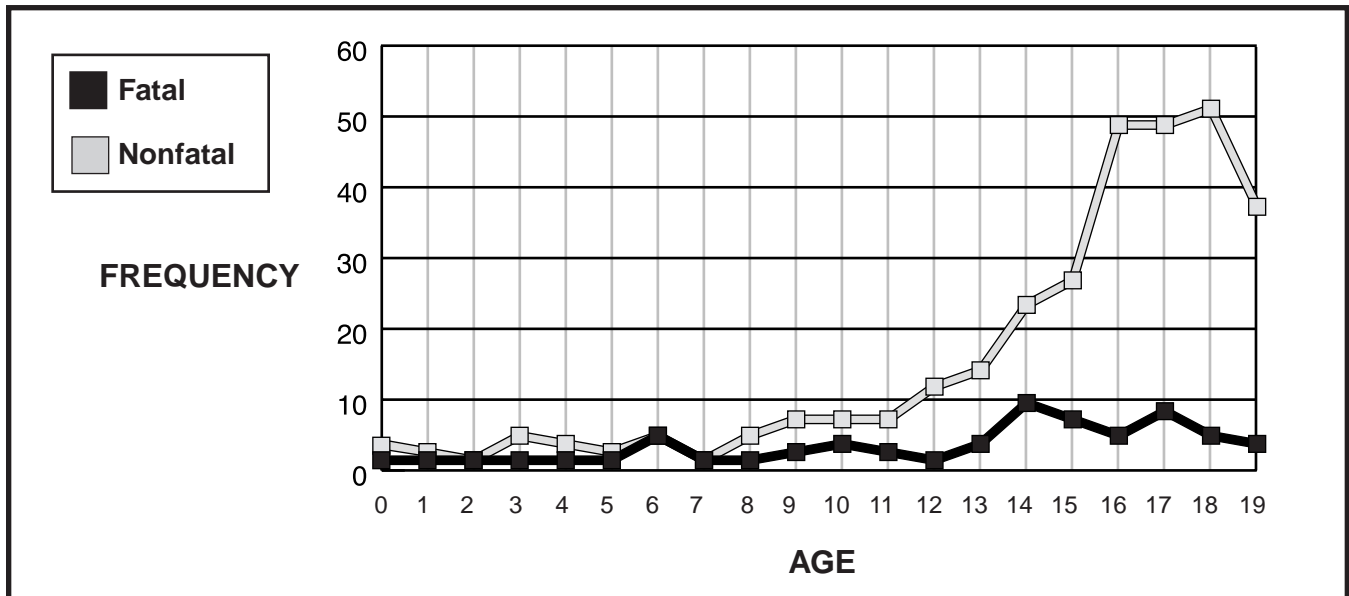
As seen in Figure 35 the number of fatal and nonfatal unintentional firearm injuries follow a similar pattern with increases in the 13 to 18 age group.

Figure 34: Unintentional Firearm Injury by Sex and Race, 1994 - 1997, Ages 0 - 19.

FATAL				NONFATAL			
SEX	Freq.	%	Rate	SEX	Freq.	%	Rate
Male	30	86%	0.8	Male	216	87%	5.9
Female	5	14%	-	Female	32	14%	0.9
Total	35	100%	0.5	Total	248	100%	3.4
RACE	Freq.	%	Rate	RACE	Freq.	%	Rate
White	21	60%	0.4	White	97	39%	1.9
Black	14	40%	-	Black	128	52%	7.6
Total	35	100%	0.5	Other	3	1%	-
				Unknown	20	8%	-
				Total	248	100%	3.4

* rates were not computed for fewer than 20 cases

Figure 35: Fatal and Nonfatal Unintentional Firearm Injuries by Age, 1994 - 1997, Ages 0 - 19.



Unintentional Firearm Injury Prevention

- Increase the percentage of guns stored safely in homes with firearms to eliminate child access.
- Increase the percentage of gun owners using gunlocks and personalized guns to prevent unintentional firings.
- Implement community based firearm safety education campaigns.
- Integrate firearm safety education and activities into school and preschool curricula for all children.
- Increase pediatrician counseling regarding firearm injury prevention.

G. Unintentional Bicycle Injury (Pedal Cycles)

From 1994 to 1997, 21 young people under the age of 20 were killed in Virginia while riding their bikes. Seventeen of these (81%) were motor vehicle-related.

In addition to the 21 deaths, there were 833 bicycle-related hospitalizations.

Bicycle injuries accounted for four percent of all injury hospitalizations among children and adolescents under the age of 20, resulting in an average of four hospitalizations per week.

As seen in Figure 36, males make up 91 percent of all fatalities and 77 percent of all hospitalizations. The hospitalization rate for males was more than three times the rate for females (17.5/100,000 and 5.3/100,000 respectively).

Whites accounted for 64 percent of all bicycle hospitalizations and 71% of all deaths. Blacks accounted for 23 percent of all hospitalizations, and 24% of all deaths. White and black hospitalization rates were similar (10.2/100,000 and 11.2/100,000 respectively).

Hospitalizations due to bicycle injuries had an average charge of more than \$7,500 per hospitalization and totaled more than 1.5 million dollars per year. As depicted in Figure 37, children between the ages of 5 and 14 represent the majority of bicycle-related hospitalizations in this age group. As seen in Figure 38, the highest number of hospitalizations occurred during April to September.

Figure 36: Bicycle Injury by Sex and Race, 1994-1997.

FATAL				NONFATAL			
SEX	Freq.	%	Rate*	RACE	Freq.	%	Rate*
Male	19	91%	-	Male	645	77%	17.5
Female	2	10%	-	Female	187	22%	5.3
Total	21	100%	-	Unknown	1	1%	-
				Total	833	100%	11.6
RACE	Freq.	%	Rate*	RACE	Freq.	%	Rate*
White	15	71%	-	White	532	64%	10.2
Black	5	24%	-	Black	189	23%	11.2
Other	1	5%	-	Other	21	3%	7.6
Total	21	100%	-	Unknown	91	11%	-
				Total	833	100%	11.6

* rates were not computed for fewer than 20 cases

Figure 37: Fatal and Nonfatal Bicycle Injuries, 1994 - 1997, Ages 0 - 19.

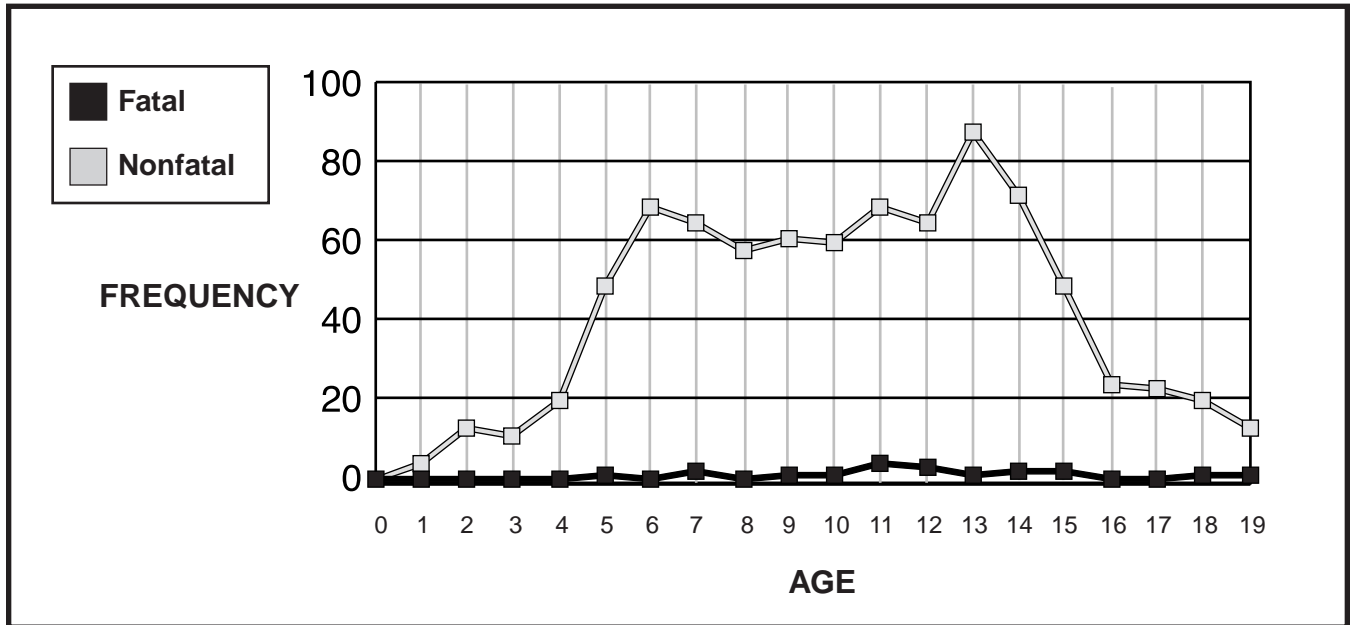
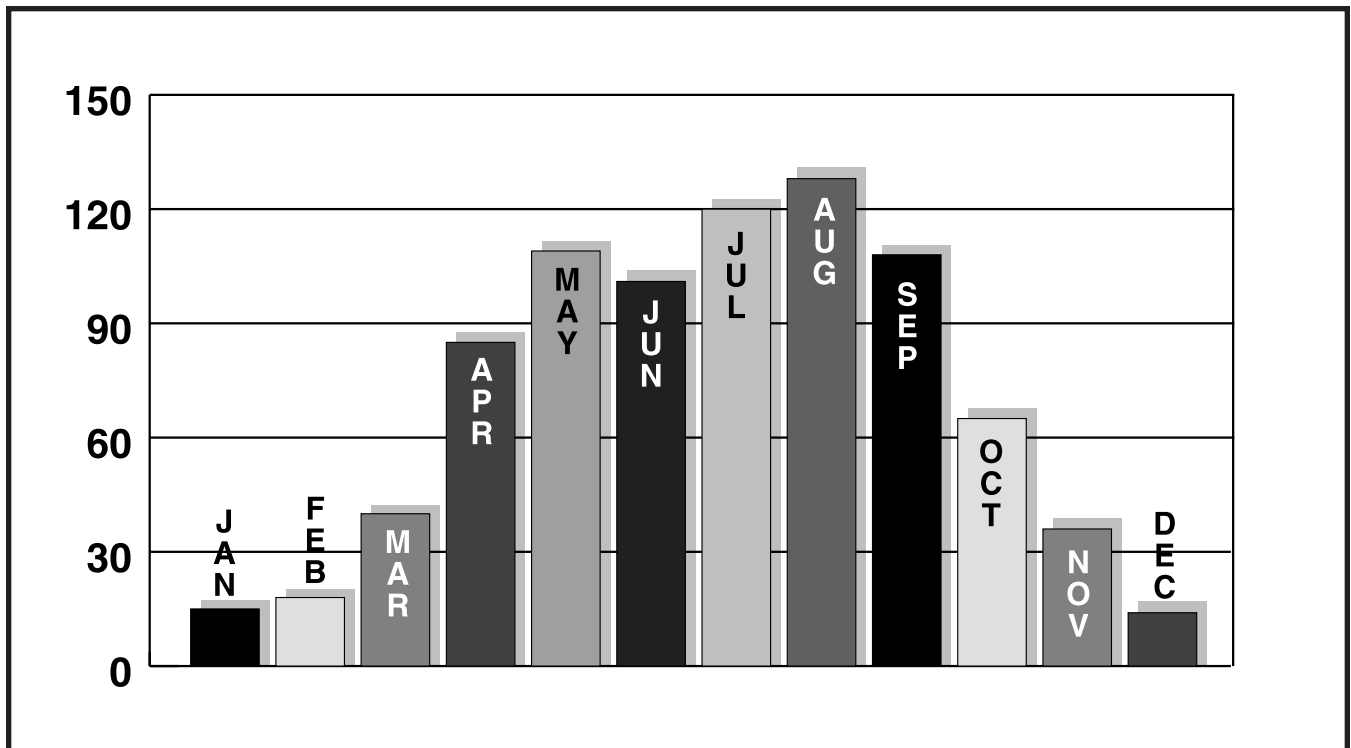


Figure 38: Nonfatal Bicycle Injuries: Frequency by Month, 1994 - 1997, Ages 0 - 19.



Bicycle Injury Prevention

- Promote the use of appropriate safety gear (e.g. helmets, kneepads, elbow pads and wrist guards) during community events involving bicycles, inline skates, skateboards, etc.
- Implement community based helmet promotion campaigns.
- Integrate bicycle safety education and activities into school curricula for all children (i.e. riding with traffic, obeying traffic signals, using hand signals, etc.).
- Encourage parents, caregivers and older adolescents to be role models by wearing helmets and adopting safe bicycle riding behaviors.
- Increase pediatrician counseling regarding bicycle injury prevention.
- Consider enactment of local bicycle helmet ordinances for children and adolescents.
- Incorporate bicyclist awareness into drivers' education courses and licensing exams.
- Implement efforts to change societal perception to view a bicycle as a vehicle, not as a toy.
- Develop "bikeable" communities - adequate lighting, pedestrian bridges, traffic calming measures, sidewalks, paths, trails, lanes on roadways that separate bicyclists from traffic, etc.
- Establish lower motor vehicle speed limits, especially in residential communities and on local roads where youth are likely to be cycling.

H. Unintentional Fall Injury

From 1994 to 1997, 17 young people under the age of 20 died due to falls. Since the majority of falls are nonfatal, this section will only focus on nonfatal falls.

In addition to the deaths, there were 3,970 unintentional fall-related hospitalizations. As depicted in Figure 39, falls from one level to another (i.e. from a building, bridge, balcony, cliff, ladder, or other embankment) were the most common and accounted for 22 percent of all fall hospitalizations. Falls on the same level (i.e. slipping, tripping or stumbling) and falls from playground equipment were second and third accounting for 16 and 10 percent respectively. Fall-related injuries accounted for 20 percent of all injury hospitalizations to children and

adolescents under the age of 20, resulting in a hospitalization rate of 55.1/100,000. Hospitalizations due to falls had an average charge of more than \$5,100 per hospitalization and more than 5.3 million dollars per year.

As seen in Figure 40, males accounted for 62 percent of all hospitalizations. The hospitalization rate for males was 1.5 times the female rate with rates of 66.7/100,000 and 42.9/100,000 respectively.

The hospitalization rate for whites was higher than that of blacks with rates of 51.3/100,000 and 44.9/100,000 respectively.

Figure 41 displays the frequency of nonfatal injuries by single year of age.

Figure 39: Types of Nonfatal Falls

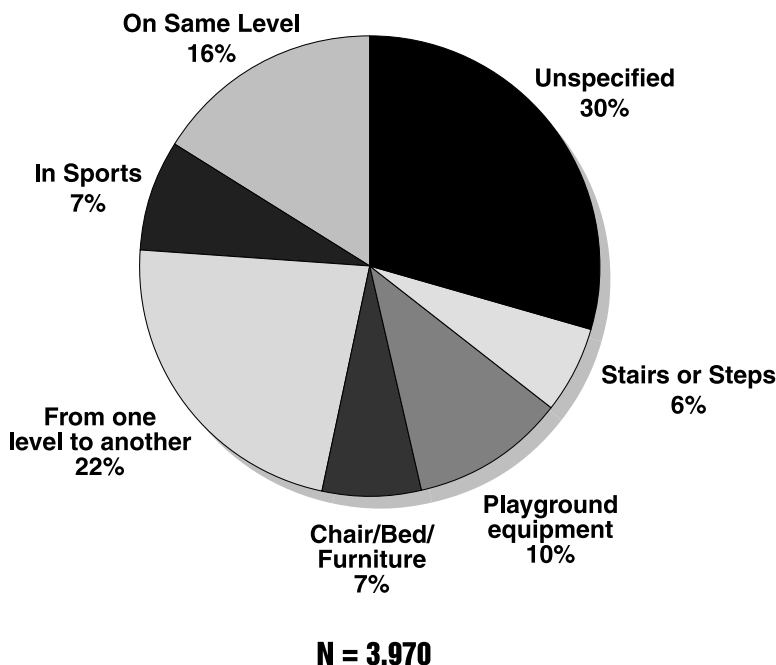
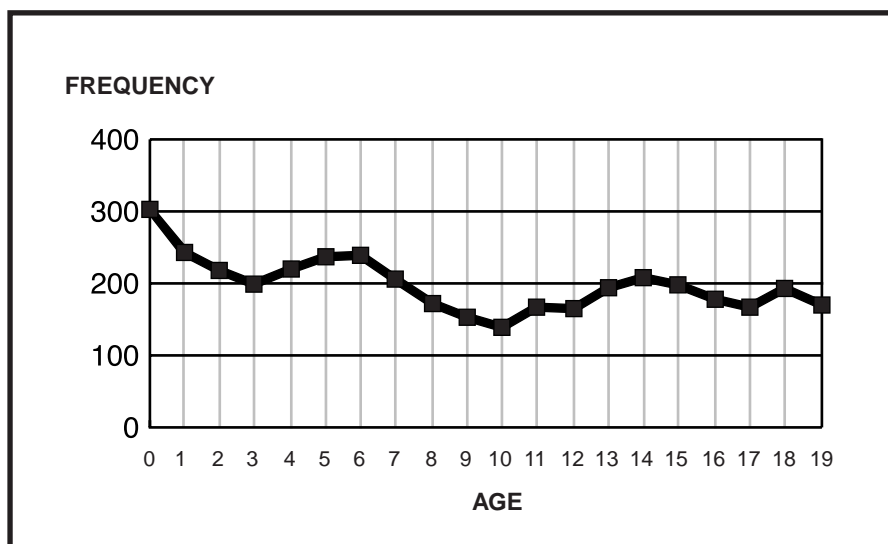


Figure 40: Unintentional Falls by Sex and Race, 1994 - 1997, Ages 0 - 19.

NONFATAL							
SEX				RACE			
	Freq.	%	Rate		Freq.	%	Rate
Male	2460	62%	66.7	White	2681	68%	51.3
Female	1509	38%	42.9	Black	760	19%	44.9
Unknown	1	-	-	Other	94	2%	33.8
Total	3970	100%	55.1	Unknown	435	11%	-
				Total	3970	100%	55.1

* rates were not computed for fewer than 20 cases

Figure 41: Nonfatal Unintentional Falls by Single Year of Age, 1994 - 1997, Ages 0 - 19.



Fall Prevention

- Educate parents and caregivers on fall hazards and develop strategies to prevent fall injuries (e.g., walker alternatives, stair gates, securing furniture).
- Increase awareness among adults that children need to be supervised at play.
- Increase the number of playgrounds that have safe surfacing, safe equipment and regular playground maintenance.
- Require the use of appropriate safety gear during sports and recreation.
- Integrate fall injury prevention activities into school and preschool curricula for all children.
- Increase pediatrician counseling regarding ways to reduce falls in and around the home.

I. Homicide and Assault

From 1994 to 1997, 338 young people under the age of 20 were killed due to homicide. Homicides accounted for 20 percent of all injury deaths to children and adolescents in this age group. The majority of all homicides (74%) were committed with firearms.

In addition to the 338 deaths, there were 1220 hospitalizations due to assault accounting for 6 percent of all hospitalizations. Of these 1220 hospitalizations, 28% were due to firearms, 24% were due to striking injuries and 17% were due to cutting and piercing injuries. See Figure 42. Hospitalizations due to assault had an average charge of more than \$10,000 per hospitalization and more than 3 million dollars per year.

As seen in Figure 43, males had a homicide rate almost three times the female rate with 6.9/100,000 and 2.4/100,000 respectively. Males also had an assault hospitalization rate three times the female rate (25.5/100,000 and 8.0/100,000 respectively).

Blacks had a homicide rate more than 6 times the white rate with 13.2/100,000 and 2.0/100,000 respectively. Blacks had an assault hospitalization rate 5 times the white rate with 40.9/100,000 and 7.7/100,000 respectively.

Figure 44 displays the frequency of fatal and nonfatal injuries by single year of age.

Figure 42: Types of Homicide and Assault, 1994 - 1997, Ages 0 - 19.

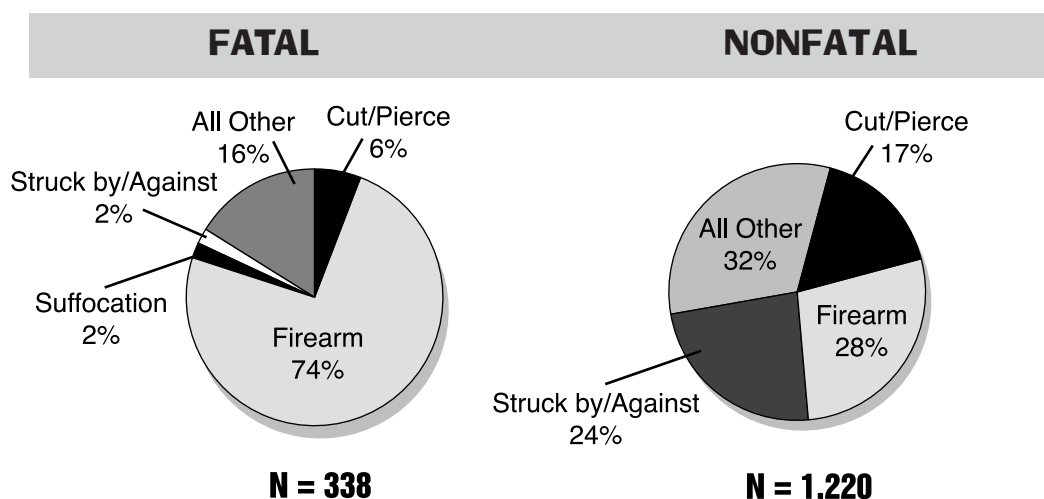


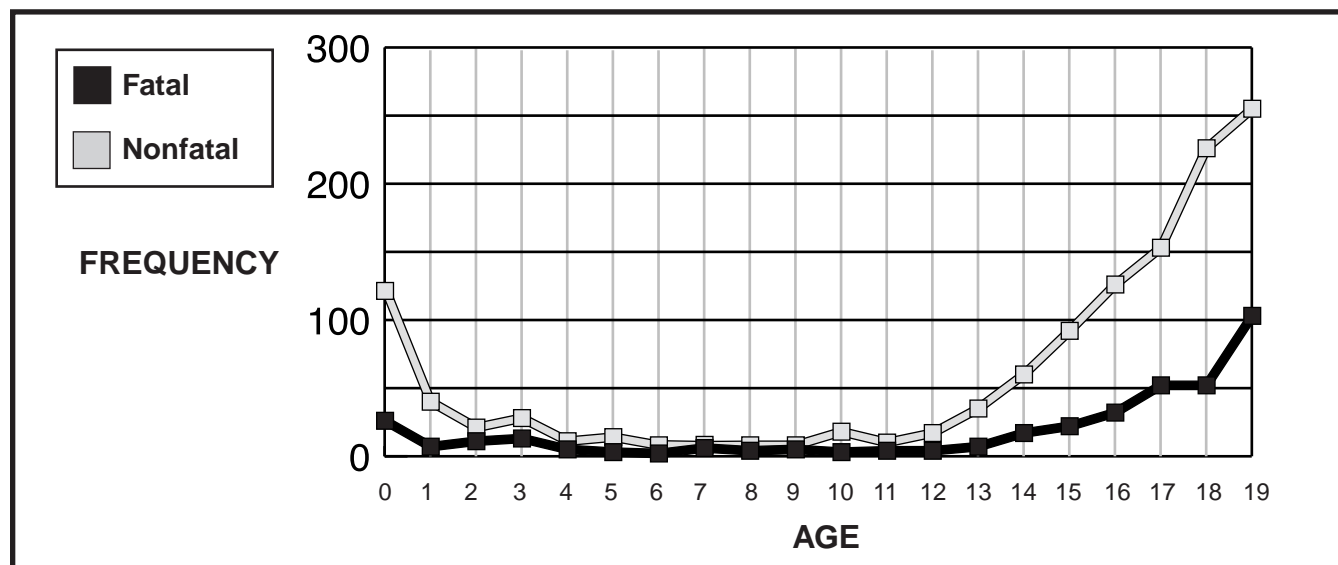
Figure 43: Homicide and Assault by Sex and Race, 1994 - 1997, Ages 0 - 19.

FATAL				NONFATAL			
SEX	Freq.	%	Rate*	SEX	Freq.	%	Rate*
Male	253	75%	6.9	Male	940	77%	25.5
Female	85	25%	2.4	Female	280	23%	8.0
Total	338	100%	4.7	Total	1220	100%	16.9

RACE	Freq.	%	Rate*	RACE	Freq.	%	Rate*
White	104	31%	2.0	White	402	33%	7.7
Black	224	66%	13.2	Black	692	57%	40.9
Other	10	1%	-	Other	23	2%	8.3
Total	338	100%	4.7	Unknown	103	8%	-
				Total	1220	100%	16.9

* rates were not computed for fewer than 20 cases

Figure 44: Homicide and Assault Injuries by Single Year of Age, 1994 - 1997, Ages 0 - 19.



Homicide and Assault Prevention

- Increase positive involvement of parents and adult role models.
- Decrease exposure to violence at home and in the community.
- Educate children and parents on the potential dangers associated with the media, internet and videogames.
- Decrease youth access to guns, alcohol and drugs.
- Increase youth involvement in after-school programs and provide safe supportive places for them to go after school.
- Foster and develop school climates that do not tolerate violence, aggression or bullying.
- Implement school and community-based violence prevention programs that involve the family, peer, media and the community to promote "connectedness".
- Promote competence in areas of self-control, decision-making, problem-solving, conflict-resolution, communication skills, relationship skills, and social responsibility.

J. Suicide and Self-Inflicted Injury

From 1994 to 1997, 216 young people under the age of 20 committed suicide with a rate of 3 suicides per 100,000 people. Suicides accounted for 13 percent of all injury deaths to people in this age group. More than half of all suicides (66%) were committed with a firearm, 22 percent by suffocation, 8 percent by poisoning and 5 percent cuts and piercing injuries. See Figure 45.

In addition to the 216 deaths, there were 3016 self-inflicted injury hospitalizations accounting for 14 percent of all hospitalizations. The majority of these were a result of poisonings (91%). Hospitalizations due to self-inflicted injuries had an average charge of more than \$4,000 per hospitalization and more than 3.1 million dollars per year.

As seen in Figure 46, males had a suicide rate more than four times the female rate with 4.8/100,000 and 1.1/100,000 respectively. Females on the other hand, had a self-inflicted injury rate almost 2.5 times the male rate of 60.1/100,000 and 24.1/100,000 respectively.

Whites had a suicide rate more than 1.5 times the black rate with rates of 3.4/100,000 and 2.2/100,000 respectively. Whites also had a higher self-inflicted injury hospitalization rate compared to blacks with rates of 38.7/100,000 and 29.6/100,000 respectively.

Figure 47 displays the frequency of fatal and nonfatal injuries by single year of age.

Figure 45: Types of Suicide and Self-Inflicted Injury, 1994 - 1997, Ages 0 - 19.

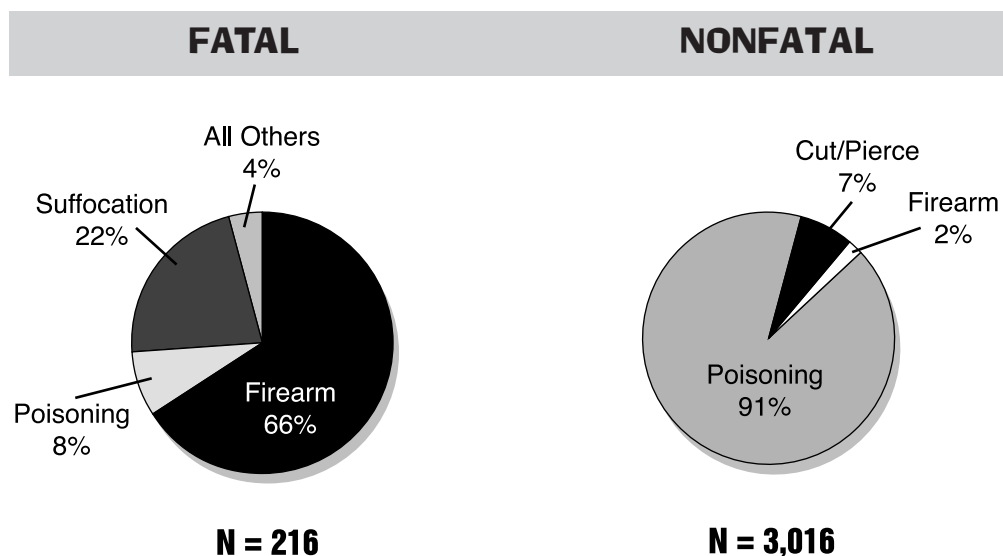


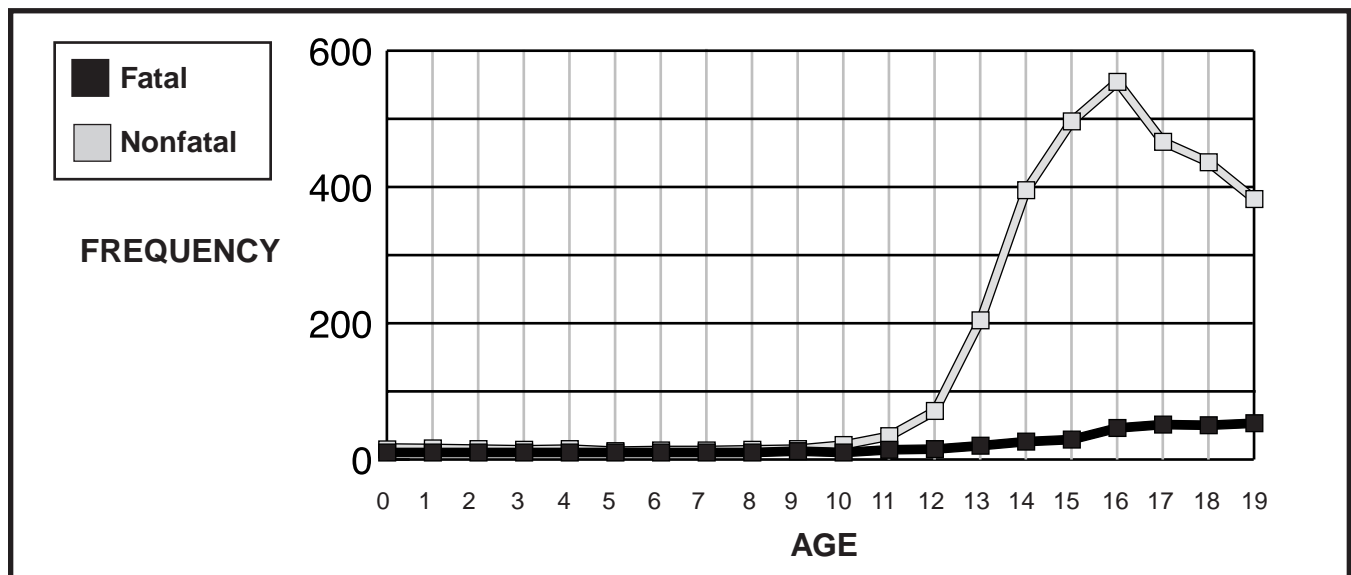
Figure 46: Suicide and Self-Inflicted Injury by Sex and Race, 1994 - 1997, Ages 0 - 19.

FATAL				NONFATAL			
SEX	Freq.	%	Rate	SEX	Freq.	%	Rate
Male	178	82.4%	4.8	Male	887	29%	24.1
Female	38	17.6%	1.1	Female	2129	71%	60.1
Total	216	100.0%	3.0	Total	3016	100%	41.9

RACE	Freq.	%	Rate	RACE	Freq.	%	Rate
White	176	81.5%	3.4	White	2025	67%	38.7
Black	37	17.1%	2.2	Black	501	17%	29.6
Other	3	-	-	Other	89	3%	32.0
Total	216	100.0%	3.0	Total	3016	100%	41.9

* rates were not computed for fewer than 20 cases

Figure 47: Suicide and Self-Inflicted Injury by Single Year of Age, 1994 - 1997, Ages 0 - 19.



Suicide and Self-inflicted Injury Prevention

- Improve the identification, referral, and treatment of persons at high risk.
- Increase positive involvement of parents and adult role models and "connectedness" with families, schools and friends.
- Increase youth involvement in after school programs and provide safe supportive places to go after school.
- Decrease individual vulnerability to suicide through education of the general population.
- Increase access to suicide prevention resources.
- Decrease youth access to guns, alcohol and drugs.
- Promote competence in areas of self-control, decision making, problem-solving, conflict resolution, communication skills, and relationship skills.

Conclusion

The purpose of this report is to support injury prevention efforts across Virginia by providing solid facts on injury demographics as a foundation to make decisions. Public health experience indicates that injuries are preventable through a variety of strategies including education (e.g. awareness and skill building), enactment/enforcement (e.g. seat belt laws), engineering (e.g. safety devices), and environmental modification (e.g. road design). The data in this report have been presented in several ways. The report describes the leading causes of injury across different age groups, as well as more specific analyses on the different types of injuries and some steps that must be taken to prevent them.

There are multiple ways of analyzing and presenting the data. The Center for Injury and Violence Prevention is committed to making the data and information more relevant to all injury prevention advocates in Virginia. Contact the Center if you are interested in the assessment of different age groupings or different mechanisms of injury. In addition, the data can be broken down by city or county level to help support local injury prevention initiatives.

Deaths and nonfatal injury data only represent the tip of the iceberg, other injury data exists, but can be more time consuming to access. This data is only the start. We encourage you to identify and access local data in your area and to talk with your local emergency departments, doctors' offices and schools to find out what information already exists, or ways to collect additional needed data.

For more information on injury prevention strategies or to be linked up with injury prevention groups in your community please contact the Center for Injury and Violence Prevention. Our contact information is on the first page of this report. Your help and action are needed to continue building healthier and safer environments so that our children can live free from the threat of serious injury.

Appendix I

Methodology

A. Sources of Data:

This report was developed and produced by the Center for Injury and Violence Prevention. The injury mortality data for Virginia were provided by the Virginia Center for Health Statistics and analyzed by the Center for Injury and Violence Prevention.

Hospitalization data were obtained from Virginia Health Information, Inc. (VHI). When a hospital admission occurs due to injury in Virginia, ICD-9-CM External Cause of Injury codes (E-codes) are recorded to reflect the cause and mechanism of injury. Other recorded patient information includes age (calculated from date

of birth and admission date), sex, race, residential zip code, diagnoses, length of stay, charge, payer information, and treatment information. Requirements for hospitals in Virginia to submit discharge data, including the reporting of E-codes, began July 1, 1993. Virginia Health Information, Inc. has been mandated to collect this discharge data from all hospitals in Virginia.

Population data was obtained from the US Census Bureau, and the following population estimates were used for rate calculations in this report:

SEX	Population
Male	3,688,343
Female	3,514,211
Total	7,202,554

RACE	Population
White	5,230,129
Black	1,694,198
Other	278,227
Total	7,202,554

AGE	Population
< 1	361,156
1 - 4	1,473,467
5 - 9	1,835,966
10 - 14	1,767,799
15 - 19	1,764,166
Total	7,202,544

B. Explanation of E-codes:

Utilizing ICD-9 E-codes, the following categories of injury were analyzed for this report (see Appendix II):

- cutting or piercing
- drowning or submersion
- falls
- fire and flames
- firearms
- poisonings
- suffocation
- hot objects or scalds
- motor vehicle traffic injuries (including pedestrians and bicyclists)
- non-traffic pedalcycle (bicycle) injuries
- non-traffic motor vehicle injuries (e.g. off road vehicles, animals and boats)
- natural or environmental causes (e.g. Animal bites, lightning)
- being struck by or striking against an object or another person

The determination of causal intent (whether the injury was unintentional, self-inflicted, or resulted from an assault) was made by utilizing the draft groupings presented in the working paper (A Proposed Mechanism/Intent Matrix for Presenting E-coded Data), which is included in Appendix 2.

The analyses presented in this document exclude E-codes related to hospital treatment and war. The excluded codes are as follows: E849, E870-876, E878-879, E929.0-9, E930.0-E949.9, E969, E977, E989, and E990-999.

C. Limitations of the Data Set

According to VHI, the reported hospital discharge data appear to be good to the extent that submitted E-codes are valid. It is difficult, however, to ascertain whether medical records coders and/or physicians have reported the correct E-code for a particular injury. Furthermore, it is believed that many hospitals under-report these codes and submit unusually low discharges of injury for various months. These factors may have influenced the rates and frequencies included in this document. For reasons that are unclear, two hospitals (Lee County and Page Memorial) had an extremely high percentage of total discharges E-coded for injury.

Another limitation of this report is that the counts of injury reported in this document represent discharges and do not represent individuals. One individual may have

been admitted and discharged from a hospital on several occasions over the year.

In addition, this report does not capture out-of-state hospitalizations of Virginia residents or injuries treated at military hospitals.

Any record for which the patient's state of residence was not Virginia was deleted.

Because patient records contain only residential zip code information, the distribution of injuries occurring across the state are based on the location of patient residence rather than on the location where the injury occurred.

When interpreting the information included in this report, one should consider these limitations and the biases or complications that they may present.

Appendix II

Table 1. Matrix of E-code groupings for presenting injury mortality and morbidity data

Mechanism/Cause	Manner / Intent				
	Unintentional	Self-inflicted	Assault	Undetermined	Other
Cut/pierce	E920.0-.9	E956	E966	E986	E974
Drowning/submersion	E830.0-.9, E832.0-.9, E910.0-.9	E954	E964	E984	
Fall	E880.0-E886.9, E888	E957.0-.9	E968.1	E987.0-.9	
Fire/burn	E890.0-E899, E924.0-.9	E958.1,.2,.7	E961, E968.0,.3	E988.1,.2,.7	
Fire/flame	E890.0-E899	E958.1	E968.0	E988.1	
Hot object/substance	E924.0-.9	E958.2,.7	E961, E968.3	E988.2,.7	
Firearm	E922.0-.9	E955.0-.4	E965.0-.4	E985.0-.4	E970
Machinery	E919 (.0-.9)				
Motor vehicle traffic ^{2,3}	E810-E819 (.0-.9)	E958.5	E968.5	E988.5	
Occupant	E810-E819 (.0,.1)				
Motorcyclist	E810-E819 (.2,.3)				
Pedal cyclist	E810-E819 (.6)				
Pedestrian	E810-E819 (.7)				
Unspecified	E810-E819 (.9)				
Pedal cyclist, other	E800-E807 (.3) E820-E825 (.6), E826.1,.9 E827-E829(.1)				
Pedestrian, other	E800-807(.2) E820-E825(.7) E826-E829(.0)				
Transport, other	E800-E807 (.0,.1,.8,.9) E820-E825 (.0-.5,.8,.9) E826.2-.8, E827-E829 (.2-.9), E831.0-.9, E833.0-E845.9	E958.6	E988.6		
Natural/environmental	E900.0-E909, E928.0-.2 E988.3	E958.3			
Bites and stings ³	E905.0-.6,.9 E906.0-.4,.5,.9				
Overexertion	E927				
Poisoning	E850.0-E869.9	E950.0-E952.9	E962.0-.9	E980.0-E982.9	E972
Struck by, against	E916-E917.9 E960.0; E968.2 E973, E975				
Suffocation	E911-E913.9	E953.0-.9	E963	E983.0-.9	
Other specified and classifiable ⁴	E846-E848, E914-E915, E918, E921.0-.9, E923.0-.9, E925.0-E926.9, E929.0-.5	E955.5,.9 E958.0,.4	E960.1, E965.5-.9 E985.5, E988.0,.4	E967.0-.9, E968.4	
Other specified, not elsewhere classifiable	E928.8, E929.8	E958.8, E959	E968.8, E969		
Unspecified	E887, E928.9, E929.9	E958.9	E968.9	988.9	E976, E997.9
All injury	E800-E869, E880-E929	E950-E959	E960-E969	E980-E989	E970-E978, E990-E999
Adverse affects					E870-E879, E930.0-E949.9
Medical care					E870-E879
Drugs					E930.0-E949.9
All external causes					E800-E999

Source: National Center for Injury Prevention and Control, Center for Disease Control and Prevention.